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the prior art. Said Kinnear patents show, describe and claim "jet bits", first introduced to the trade by licensees under said patents, which were quickly adopted and have revolutionized the well drilling industry by drilling wells up to 500', faster and drilling 50', more hole per bit than old prior art bits. The industry has discarded the old prior art bits for the *new* jet bits which are a "*great commercial success*" used by Respondent and the industry from authorized licensees under Petitioner's Patents and who knowingly paid a premium for Petitioner's jet bit patented product, but, Respondent refuses to pay for its "*unauthorized*" uses of Petitioner's patented jet bit inventions. Should such wrong decisions and judgments by the inferior courts below become final and usurp a patentee's rights and constitutional rights without review and correction by The Supreme Court whose duty it is to insure uniformity of decision amongst the several inferior courts, which wrong decisions and judgments involve "*tremendous important principles*" and emasculates all correct former court decisions concerning patents and the patent laws and has so far departed from the accepted and usual course of judicial proceedings thereto so as to call for an exercise of The Supreme Court's power of supervision.

II.

The Findings of Fact, Conclusions of Law and Judgment of the United States District Court for The Eastern District of Texas are in conflict with the Opinion, Findings of Fact, Conclusions of Law and Judgment of The United States District Court for the District of Columbia pertaining to Petitioner's Patents and the inventions thereof which conflicts will remain unsolved unless settled by The Supreme Court.

III.

The District Court below held petitioner's patents invalid and void and the Appellate Court below held that validity of said patents was not essential to the disposition of the issues of this case and specifically stated it *"could not satisfy itself as to the validity of the claims of said patents"* although that issue was presented on appeal before the Appellate Court, *"which allows the Trial Court to be a Court of last resort on the question of the validity of a patent without appellate review"* on a question of law which The Supreme Court must settle since the issue was raised by the respondent and remains unsettled by appellate review.

IV.

There is irreconcilable conflicts within the opinions and judgment of the Court of Appeals below which will not support the judgments of the District Court or the Court of Appeals below, which if left to stand will deprive Petitioner of its rights in this case unless The Supreme Court resolve said conflicts.

V.

There is irreconcilable conflicts within the Findings of Fact, Conclusions of Law and Judgment of The District Court below which will not support the judgment of the District Court, which if left to stand will deprive Petitioner of its rights in this case unless The Supreme Court resolve said conflicts.

VI.

The Findings of Fact, Conclusions of Law, Opinions and Judgments of both courts below in this case are clearly erroneous and in conflict with the applicable law of other federal courts and of other Federal courts and of the Supreme Court involving the same principles of law relating thereto which are of great public importance which errors and conflicts should be resolved by The Supreme Court.

VII.

In Finding of Fact 3 the District Court below found only Four (4) claims charged against Respondent and disposed of the Four (4) claims as being *"involved and inextricably connected with the patents in suit"*. The Appellate Court below found said Four (4) claims and the additional claim of Unjust Enrichment charged against Respondent. The Appellate Court below *"agreed with the District Court's disposition of the claims other than for patent infringement"*. Both courts below used artificial rules of interpretation and misinterpreted Petitioner's patents, and, used the wrong criteria and tests of standard of invention, validity, infringement and comparison of said patents in suit with the prior art, which makes wrong decisions and judgments of both courts below. Should the wrong decisions and judgments of both courts below be allowed to stand without Supreme Court supervision and correction, where both courts below disposed of *"all claims"* charged by Petitioner against Respondent on the premise that said claims charged *"involve and are inextricably connected with the patents in suit"*, where neither of said courts below understand or have correctly interpreted Petitioner's patents, yet, this is the theory and premise upon which both courts below clearly erred in disposing of all claims charged against Respondent by Petitioner. Further, Petitioner's charge against Respondent of the claim of Violation of Confidential Relationship has nothing to do with said patents, as was erroneously held by both courts below, but, on the contrary said claim is based upon wrongful appropriation of Petitioner's *"Trade Secrets"*.

VIII.

The Appellate Court below failed and refused to review on appeal the presented numerous Findings of Fact and Conclusions of law of the District Court which are clearly erroneous, but stated it *"passed directly upon a few simple propositions which we find determinative of the result of this appeal"*. The Appellate Court misinterpreted Petitioner's Patents upon which it based its clearly erroneous decisions and judgment, and, the failure of the Appellate Court to review the numerous Findings and Conclusions of the District Court deprives Petitioner of appellate review of the clearly erroneous findings, conclusions and judgment of the District Court. The Supreme Court under these circumstances should not surrender its appellate jurisdiction and leave petitioner *"adrift without relief or remedy"*, but should invoke its supervisory powers to correct both irresponsible and clearly erroneous findings, conclusions, opinions and judgments below and grant relief to which Petitioner is entitled.

IX.

The Respondent does not have the right or benefit of the Findings of Fact and Conclusions of Law of the District Court concerning or pertaining to Petitioner's Patents to support the judgment of the District Court, since the interpretation of the Petitioner's Patents by the District

Court was *"overruled"* by the interpretation of said patents by the Appellate Court below, because the District Court found in Finding 52 that,

> "There is no indication in either of the patents that the subject matter of the alleged invention was the *positioning of the water courses*. There is no suggestion in either of the patents that *any* of the water courses should be so positioned that the drilling fluid issuing therefrom would be discharged so as to *miss the cutters* and *strike directly onto the bottom of the hole*. On the contrary, the drilling fluid discharged from *each of the water courses* of the bit disclosed in the patents would hit the cutting elements."

Whereas, the Kinnear patents contrary to the said District Court's Finding 52 in Reissue patent 23,416 and in Column 5, lines 49-63 states,

> "This position of these fluid course ducts, (water courses), with respect to the cutting elements, and with respect to their emerging on the exterior surface and well upon the outside surface of the bit body are of *extreme importance* as this allows the flushing fluid to * * *, *directly blast* the bottom of the well hole in the *near proximity* of where the inner bottom cutting elements and the outer bottom roller cutters take their respective cuts in the substance being drilled."

But, to the contrary, the Appellate Court overruled the District Court's interpretation of said patents by holding that Kinnear, *"recognized the importance of having the drilling fluid strike directly on the bottom of the hole"*, which is the Appellate Court's interpretation of said patents disclosing water courses so positioned that the drilling fluid issuing therefrom would be discharged so as to *miss the cutters* of the bit. This interpretation of Petitioner's Patents by the Appellate Court as to the positioning of the water courses with respect to the cutting elements of the bit allows the fluid to *miss* the cutters and *"directly blast the bottom* of the well hole adjacent to the bottom sides of the outer roller cutters" as shown in the drawings, described in the specification and claimed in the claims of said patents. Respondent has failed to take an appeal or present a petition for Writ of Certiorari to The Supreme Court within the time required by law from the opinions of the Appellate Court below *"overruling"* the District Court's interpretation of Petitioner's Patents which goes to the *"very heart of the inventions claimed"*, and, which renders void the Findings of Fact, Conclusions of Law and Judgment based thereon of the District Court concerning or pertaining to the Petitioner's Patents. In view of these circumstances the Supreme Court should decree and adjudge the Findings of Fact, Conclusions of Law and Judgment based thereon of the District Court to be void pertaining to or concerning Petitioner's Patents.

X.

Both the District and Appellate Courts below failed and refused to impose the burden of proof on Respondent to establish invalidity and lack of invention in Petitioner's Patents. Respondent had only one witness to testify on the questions of invalidity and lack of invention of Petitioner's Patents and stated that not any of the prior art cited by Respondent *"singularly"* could meet *"any of the claims 3 through 20 inclusive"* defined in Petitioner's Reissue Patent 23,416 (R. XIII, 3384-91 and R. XIV, 3773-

3863, pertinent excerpts of testimony of which is set out in pages 40-62 in 369 page BRIEF FOR PLAINTIFF-APPELLANT dated November 27, 1957 and filed November 29, 1957 with Court of Appeals below, a certified copy and 9 additional copies of which are filed with The Supreme Court for its convenience and reference). The Trial Court Judge by his own interrogation of the said only expert witness of Respondent stated that he understood the "*gist of said witnesses testimony*" that "not one single prior art reference cited would meet the terms of any claim of Petitioner's patent, and, that it required 3 to 4 references in connection with the Hughes Patent 1,204,157 to point out single elements from each reference by which Respondent erroneously attempted to show anticipation of the claimed combinations of inventions in Petitioner's Patent in suit (R. XIV, 3784-85). The burden of proof was on Respondent to establish anticipation of Petitioner's Patents by the prior art which it clearly failed to discharge such burden and therefore without "*any proof*" the District Court below invalidated Petitioner's Patents, and did not follow the established law on presumption of validity attached to the issuance of Petitioner's patents, and, the District Court circumvented the settled law by not using every reasonable doubt to uphold the validity of Petitioner's Patents.

This is a triple error on the part of the District Court as follows:

(1) No proof whatsoever by Respondent to discharge burden of anticipation to establish invalidity of Petitioner's Patent, yet, the District Court held the patent invalid and void, however, Respondents' only expert witness admitted on cross-examination "no single prior

art reference cited by Respondent could meet the terms of any of the claims 3-20 of Petitioner's Reissue Patent No. 23,416. (R. XIII, 3384-91 and R. XIV, 3773-3863);

(2) The District Court failed and refused to accord presumption of validity to Petitioner's valid issued patent; and,

(3) The District Court by holding Petitioner's Patent invalid and void without any proof whatsoever in the prior art cited to establish invalidity of said patent is a case of prejudice and discrimination against Petitioner and for Respondent.

The Appellate Court held that,

> "The issues are so far flung and broadly drawn, that *we have not satisfied ourselves as to the validity* of the claims * * * in the patent."

Yet to the contrary, the Appellate Court being in "*doubt as to validity*" from its above holding "affirmed" the District Court's judgment "That U. S. Patent No. 23,416 is invalid and void". This is a triple error on the part of the Appellate Court, as follows:

(1) Validity of a patent is presumed when the Court is in doubt;

(2) Conflict within the Appellate Court's opinion by being in doubt as to validity, yet, affirming District Court's Judgment holding the patent invalid and void; and,

(3) Being in doubt as to validity yet holding the patent invalid and void is a case of prejudice and discrimination against Petitioner and for Respondent.

Should the Supreme Court allow and permit the inferior courts below to invalidate a legally issued patent to a meritorious invention without any proof whatsoever to establish invalidity of said patent, particularly when on cross-examination Respondent's only witness on the question was forced to admit, and which is a judicial admission, that Respondent could not discharge the burden of proof of anticipation of Petitioner's Patent because said witness admitted that not one single prior art reference cited, by itself, could meet the combination of parts or elements combined and arranged in the way as defined in any of the claims in Petitioner's Patent, and, should disregard by the inferior courts below of the settled law pertaining to doubt as to validity, presumption of validity, burden of proof, prejudice and discrimination be allowed to prevail to invalidate a meritorious patent in defiance of and failure to follow the law enunciated by The Supreme Court as to the test of validity of Petitioner's Patent.

XI.

Both Courts below had no evidence to support their Findings of Fact, Conclusions of Law, Opinions and judgments while disregarding the evidence, admissions and judicial admissions contra thereto, and, used the wrong standards and tests in deciding Respondent's affirmative defenses of limitation, estoppel, laches, late claiming and intervening rights, which should be resolved by The Supreme Court, otherwise the inferior courts below will be allowed to start wrong and dangerous precedents from time to time by setting up their own incorrect standards and tests on said issues as was done in this case, which will cause confusion amongst the several federal courts in direct opposition to the standards and tests already enunciated by The Supreme Court on the above defenses of a litigant.

XII.

Both courts below had no evidence to support their Findings of Fact, Conclusions of Law, Opinions and judgments while disregarding the evidence, admissions and judicial admissions contra thereto, and used the wrong standards and tests in deciding Petitioner's Claims of Violation of Confidential Relationship pertaining to disclosure of Petitioner's Trade Secret charged against Respondent, which should be resolved by The Supreme Court, otherwise the inferior courts below will be allowed to start wrong and dangerous precedents from time to time by setting up their own incorrect standards and tests on said claim as was done in this case which will cause confusion amongst the several federal courts in direct opposition to the standards and tests already enunciated by The Supreme Court.

XIII.

Both courts below had no evidence to support their Findings of Fact, Conclusions of Law, Opinions and judgments while disregarding the evidence, admissions, and judicial admissions contra thereto, and, used the wrong standards and tests in deciding Petitioner's Claim of Unjust Enrichment charged against Respondent, which should be resolved by The Supreme Court, otherwise the inferior courts below will be allowed to start wrong and dangerous precedents from time to time by setting up their own incorrect standards and tests on said claim as done in this case which will cause confusion amongst the several Federal courts in direct opposition to the standards and tests already enunciated by The Supreme Court.

XIV.

Both courts below had no evidence to support their Findings of Fact, Conclusions of Law, Opinions and Judgments while disregarding the evidence, admissions and judicial admissions contra thereto, and, used the wrong standards and tests in deciding Petitioner's Claim of Unfair Competition and Unfair Trade Practices charged against Respondent, which should be resolved by The Supreme Court, otherwise the inferior courts below will be allowed to start wrong and dangerous precedents from time to time by setting up their incorrect standard and tests on said claim as was done in this case which will cause confusion amongst the several Federal courts in direct opposition to the standards and tests already enunciated by The Supreme Court.

XV.

Both courts below had no evidence to support their Findings of Fact, Conclusions of Law, Opinions and Judgments while disregarding the evidence, admissions and judicial admissions contra thereto, and, used the wrong standards and tests in deciding Petitioners' Claim of Violation of Monopoly or Anti-trust Laws charged against Respondent which is claim raising a federal question and involves principles of great public importance that should be resolved by The Supreme Court for damage done to the business and property of Petitioner and for injury to the public, otherwise the inferior courts below will be allowed to start wrong and dangerous precedents from time to time by setting up their own incorrect standards and tests on said claims as was done in this case which will cause confusion amongst the several Federal courts in direct opposition to the standards and tests already enunciated by The Supreme Court.

XVI.

Both courts below failed and refused to pass upon the perjury committed and unclean hands used in this case by Respondent, its Witnesses, Executives, Engineers and Agents relating to material issues in this case. Should the inferior courts below after Petitioner presented the issues with absolute proof be allowed to disregard perjury and unclean hands by the above named involving material issues in this case, and should perjury and unclean hands as referred to above be allowed to violate the sanctity of the Federal courts and extend Respondent protection, equal privileges and rights under the law as litigants with clean hands and free from perjury without said Respondent and perjurers being brought to justice and judgment by The Supreme Court, because the inferior courts below failed and refused to do their duty.

Statement

Petitioner's Complaint was filed against Respondent on April 6, 1953, and was amended by First Amended Original Complaint filed Jan. 14, 1955 (R. I, 6) on which the case was tried. The jurisdiction of the District Court was invoked because the case arises under the Patent, Unfair Competition and Monopoly or Anti-Trust Laws of the United States. (U.S.C. Title 35, Sections 281 and 283; Title 28, Sections 1337, 1338(a) and (b), and 1400 (b); Title 15, Sections 1, 2 and 15; and, Art. 1, Sec. 8 of The Constitution of the United States. Respondent filed its Amended Answer and Supplemental Answer on Jan. 25,

1955. (R. I, 47). The case proceeded to trial on its merits on Feb. 28, 1955 and was concluded on April 1, 1955 (without written opinion) and Findings of Fact and Conclusions of Law were entered on Sept. 28, 1956 (R. XVI, 4270) and Final Judgment of the District Court was entered Oct. 10, 1956 (R. XVI, 4323). Notice of Appeal made to The United States Court of Appeals for the Fifth Circuit and filed Jan. 30, 1957 (R. XVI, 4366) on which Argument and Submission was had before said Court on April 29, 1958 (R. XVI, 4400), Opinion of said court filed Sept. 22, 1958 (R. XVI, 4401), Judgment of said court filed Sept. 22, 1958 (R. XVI, 4410), Order to Extend Time to file Petition and Brief for Rehearing entered Sept. 29, 1958 (R. XVI, [illegible]413). Another Order to Extend Time to file Petition and Brief for Rehearing entered ________________, 1958 (R. XVI, 4415), Petition for Rehearing filed Dec. 12, 1958 (R. XVI, 4416), Petitioner, Appellant's Brief in Support of Petition for Rehearing filed Dec. 12, 1958 (R. XVI, 4423), Respondent's Brief for Appellee on Appellant's Petition for Rehearing filed Jan. 29, 1959 filed at the request of the court (R. XVI, 4547), Petitioner's Reply Brief of Plaintiff-Appellant in Support of Petition for Rehearing filed Feb. 19, 1959 (R. XVI, 4572), OPINION ON REHEARING filed April 30, 1959 (R. XVI, 4639), Order Denying Rehearing filed April 30, 1959 (R. XVI, 4641), Order Staying Mandate filed May 15, 1959 (R. XVI, 4645). Motion For Leave to File Second Petition for Rehearing filed May 21, 1959 (R. XVI, Supp. Tr., 1), Second Petition for Rehearing filed July 2, 1959 (R. XVI, Supp. Tr. 3), Order Permitting Petition for Rehearing to be Filed and Denying same filed July 2, 1959 (R. XVI, Supp. Tr. 34), Order Staying Mandate filed July 14, 1959 (R. XVI, Supp. Tr. 38), and AFFIDAVIT with Exhibits showing "commercial success" of Petitioner's Patents and showing Respondent, et al. with Perjury and Unclean Hands in this case (pages 1 to 23) presented June 18, 1959 as per Clerk's Certificate dated August 14, 1959 (R. XVI attached to Supp. Tr.). From which this Petition for Writ of Certiorari is made.

The Appellate Court below erroneously affirmed the Judgment of the District Court and erroneously entered its Judgment thereon for Respondent, and, would not pass upon vital issues in this case, some of which involve Federal Laws and Federal Constitutional questions which should be settled by The Supreme Court. The Supreme Court should resolve the conflicts which clearly appear within each of the decisions and judgments of both courts below. The Supreme Court should resolve the conflicts between the District Court below and the District Court for the District of Columbia who have made conflicting decisions on the questions of invention and validity of Petitioner's Patents, which issues are left unsettled because the Appellate Court below "could not satisfy itself as to invention and validity of Petitioner's Patents", and, failed and refused to pass upon same, but yet, affirmed the judgment of the District Court below holding Petitioner's Patents invalid and void, which is also one of the conflicts within the decisions and judgment of the Appellate Court below. The Supreme Court should settle the conflicts on applicable questions of law pertaining to material issues in this case on which questions of law both courts below are in conflict with settled law of other Appellate Courts and The Supreme Court, and, recent former decisions of the Court of Appeals for the

Fifth Circuit to bring about uniformity of decision thereon whereby the correct criteria and tests of the law shall be applied on such issues amongst the several inferior courts.

Reasons For Granting The Writ

I.

The District Court below clearly erred in making wrong Findings of Fact and Conclusions of Law and Judgment based thereon and "EXACTED MORE" for the "standard of invention" in its interpretation of Petitioner's Patents than is required by the statute to procure and maintain a valid patent and used "artificial rules of interpretation" and "wrong criteria and tests" of invention, validity, infringement and comparison of said patents in suit with the prior art, as follows:

1. Findings of Fact 13, 51 and 52 states in substance that the "*all*" of the drilling fluid issuing through "*all*" of the water courses, (fluid course ducts in Petitioner's patents), discharges "*onto the cutters*" none of which drilling fluid misses the cutters and strike directly onto the bottom of the hole. Finding 52 particularly states that,

> "There is no suggestion in either of the patents that *any* of the water courses should be so positioned that the drilling fluid issuing therefrom would be discharged so as to miss the cutters and strike directly onto the bottom of the hole. On the contrary, the drilling fluid discharged from *each* of the water courses of the bit disclosed in the patents would *hit* the cutting elements."

The Appellate Court overruled the District Court on the above interpretation of Petitioner's patents by stating in its opinion on page 8 thereof (R. XVI, 4408) that,

> "Kinnear, * * *, had recognized the importance of having the drilling fluid *strike directly on the bottom of the hole*, * * *."

Petitioner's Kinnear Original and Reissue Patents both disclose as set out in Reissue Patent No. 23,416 in Column 5, lines 49-63 that,

> "This *position* of these *fluid course ducts* with respect to the *cutting elements* and with respect to their emerging on the exterior surface and well upon the outside surface of the bit body are of *extreme importance* as this allows the flushing fluid to * * * *directly blast the bottom of the well hole* in the *near proximity* of where the inner bottom cutting elements and the outer bottom roller cutters take their respective cuts in the substance being drilled."

It can be seen from the above quotation from the patent specification that the District Court misinterpreted the construction and arrangement of the parts of the Kinnear patents as to the "positioning of the fluid course ducts with respects to the cutting elements, which specification particularly emphasizes the "*extreme importance*" of having this relationship of the fluid course ducts with respect to the cutting elements being "*positioned*" so that the drilling fluid will "*directly blast the bottom of the well hole*". Therefore, the District Court's interpretation of the Kinnear patents are clearly erroneous which voids all findings of fact and conclusions of law and judgment based thereon pertaining to Petitioner's patents.

The District Court pitched its decisions and judgment upon all Claims in the Complaint charged by Petitioner against Respondent as per the District Court's finding of fact 3 which states said claims charged

> "* * * involve, and are inextricably connected with the above-mentioned two Kinnear Patents, Nos. 2,380,112 and Re. 23,416."

Since the District Court misinterpreted the Kinnear Patents and pitched its entire decisions on all claims charged upon its clearly erroneous interpretations of said patents renders the District Court's entire Findings of Fact, Conclusions of Law and Judgment based thereon "VOID" as said Findings and Conclusions will not support the judgment.

The law is well settled that it is necessary for the court to correctly interpret a patent *"before"* the court can rule on the questions of invention, validity, infringement, scope of the claims of the patent or anything pertaining to the patents and the inventions thereof, as stated in the Supreme Court case of *Ashcroft v. Railroad Co.*, 97 U.S. 189-97, 24 L. Ed. 982-85; *Getty v. Kinzbach Tool Co., Inc.*, 119 F. 2d 249 (C.A. 5th Cir., 1941) c. d. 314 U.S. 651, 62 S. Ct. 97.

2. The District Court misinterpreted Petitioner's Patents and clearly erred in Finding 52 by stating in part, that,

> "Neither of the patents in suit contains any disclosure of any bit other than a particular type of combination bit."

The above finding is untrue, because Figs. 8, 9 and 10 of the Kinnear Patents disclose a rock bit having *"all roller* *cutters* thereon" and are different from the type of bit disclosed in Figs. 1 through 5 and 11 through 13 which are known in the bit industry as *"combination type bits"* having both roller cutters and blades *"in combination"* as the cutting elements of the bit. The claims of the Kinnear Reissue Patent 3 through 12 and 17 through 19 define a "combination type bit", whereas, patent claims 13 through 16 are drawn to and define an *"all roller cutter rock type bit"*, therefore the finding 52 referred to above is clearly erroneous.

3. The District Court misinterpreted Petitioner's Patents and clearly erred in Finding 52 by stating in part, that,

> "There is no mention in either of the patents of drag bits, * * *."

The above Finding 52 is untrue, because the Kinnear patents disclose fish-tail drag type blades both in the drawings and the written description and claims, as stated in Reissue Patent in Column 5, lines 3-4 states, that,

> "Inner bottom cutting elements 13, 13a and 14 are of the fish tail drag type blade, * * *."

The above quoted part of Finding 52 is in conflict with Finding 51 in the interpretation of the Kinnear patent because 51 in part states,

> "The principal embodiment has a plain fish-tail blade."

The Finding 52 is clearly erroneous as above proven by the above comparison of Finding 52 and 51 and is further in error because 52 conflicts with 51 which makes both findings 51 and 52 in irreconcilable conflict with each other.

4. The District Court clearly erred in Finding 52 by stating in part, that,

> "There is no mention in either of the patents * * *, of cone bits * * *."

The above finding 52 is untrue, because Figs. 9, 10 and 12 in the Kinnear Patents disclose cone type roller cutters for a cone type bit. No perfect cones are made or used on any drilling bits, but on the contrary are frusto-conical shaped, which is the type of cone disclosed and shown in the Kinnear Patents numbered 28 in Figs. 8 and 9, and part 11a in Figs. 11 and 14.

5. The District Court clearly erred in Finding 52 by stating in part, that,

> "There is no mention in either of the patents of * * * cross-roller bits.".

The above Finding 52 is untrue because the inner bottom cutting elements of the Kinnear Patents designated as roller cutters 28 shown in Fig. 8, when substituted and interchanged with inner bottom cutting elements or blades 13 or 13a and attached welding 18 to the bit body 1 in Fig. 1 transversely to the outer roller cutters 11 mounted on bit body. 1, which arrangement makes a cross-roller type bit, and, this is pointed out and described in Kinnear Re. 23,416 in Column 4, lines 6-28 and more particularly in Column 4, lines 19-21 which states,

> "Different inner bottom cutting elements are selected to suit the substance being drilled."

6. The District Court misinterpreted Petitioner's Patents and clearly erred in Finding 52 by stating in part, that,

> "There is no indication in either of the patents that the subject matter of the alleged invention was the positioning of the water courses." (The term water courses being synonymous with fluid course ducts used in the Kinnear patents).

The above Finding 52 is untrue because Kinnear Re. 23,416 in Column 5, lines 49-54 states,

> "This *position* of these *fluid course ducts* with respect to the *cutting elements*, and with respect to their emerging on the exterior surface and well upon the outside surface of the bit body are of *extreme importance* * * *."

This is misinterpretation and obvious clear error from a cursory reading of the quoted lines 49-54 of the Kinnear Patent, and reading of claims 9, 10, 12, 13-20 inclusive which particularly point out and claim the positioning of the fluid course ducts on the Kinnear bit.

7. The District Court misinterpreted Petitioner's Patents and clearly erred in Finding 53 by stating in part, that,

> "Neither of the patents *discloses* or mentions the use of abrasion resistant material in the water courses or nozzles."

The above Finding 53 is untrue, because Kinnear Reissue Patent in Column 4, lines 28-31, states,

> "*Hard surface material* may be attached to any or all of the cutting elements or *bearing surfaces* in the well known manner."

The District Court's Finding 27 particularly holds that "*hard surface material*" is "*erosion resistant material*", therefore the Kinnear patents do disclose "erosion resistant material" in the water courses or nozzles, which are the interior "bearing surfaces" of the fluid course ducts 29 lining the water courses for the flushing fluid to bear there against while discharging there through as shown in Figs. 1; 2, 3, 5, 11 and 12 of the drawings. A pair of fluid course ducts 29 are shown as separate parts in Fig. 5 as small round tubes lining the watercourses through the bit body 1. This is not only misinterpretation of Petitioner's patents as to what was disclosed in the patents but the Appellate Court made a greater error by "EXACTING MORE" and used the "wrong criteria and tests" than is required by the statute to procure and maintain a valid patent because *the material used has nothing to do*" with the restrictions of the statute and the laws pertaining to the patenting of an invention "which criteria and test of the applicable law" is well stated in The Supreme Court case of *Motion Pictures Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502-21, at page 512. The District Court "EXACTED MORE" than is required by the statute in holding in Finding 53 that Kinnear was required to name the materials used in his drill bit to disclose the necessary requirements to procure and maintain a valid patent, whereas, this type of vice was condemned by the Supreme Court in the case of *Great A & P Tea Co. v. Supermarket Equip. Corp.*, 340 U.S., at page 154, in which case, the lower courts "EXACTED LESS" than is required by law for the "standard of invention" to disclose and claim an invention in order to procure and maintain a valid patent.

8. The District Court misinterpreted Petitioner's Patents and clearly erred in Finding 54 by stating in part, that,

> "Neither of the patents *discloses* the drilling conditions under which the tool shown therein is to be used. Specifically, there is no *disclosure* of the pump pressure, circulating rate, nozzle velocity, rotating speed, weight on the bit or annular rising velocity. * * *"

Again, the District Court "EXACTED MORE" from Kinnear in his Patents than is required for the "standard of invention" because all Kinnear was required to disclose was his drill bit and describe and claim his invention in order to obtain a valid patent thereon which he did, and, it would be "EXACTING MORE" than the statute requires to force Kinnear to write into his patent the District Court's Finding 54 since for example, Kinnear is not required by law to disclose in his patent "the speed with which his drill bit is to be rotated or turned, etc., any more for example than Thomas Edison was required to disclose how much electricity or how fast the electricity traveled through his incandescent lamp. In the well drilling art it is well known that drill bits have to be turned or rotated at many different speeds according to the stratum being drilled, depth at which drilling is being conducted and many varied conditions of operations which is mere "*mechanical skill*" at the will of the operator, and certainly it is well known that a rotary bit has to be rotated to perform rotary drilling operations. In drilling a well every foot to which the well is deepened varies and changes the conditions pertaining to the performance of the "Hydraulic System" in rotary drilling, and, it would be impossible for Kinnear or any other inventor to disclose each and every varying condition encountered by the drill bit in rotary drilling of a well. Disclosing varying conditions is not required in describing and claiming an invention as was held by The Supreme Court in the case of *Eibel Process Co. v. Minnesota Ontario Paper Co.*, 261 U.S. 45-73, 67 L. Ed. 523, 43 S. Ct. 322; *Cold Metal Process Co., et al. v. Republic Steel Corp.*, 233 F. 2d 828.

9. The District Court misinterpreted Petitioner's Patents and clearly erred in Finding 55 by stating in part, that,

> "Neither of the patents *discloses* the *size* of any of the water courses * * *. However, no *dimensions* are given. * * *."

Again, the District Court "EXACTED MORE" and used the "*wrong criteria and tests*" and put a greater burden on the patentee Kinnear than is required by the patent laws for the "*standard of invention*" to procure and maintain a valid patent. Sizes and dimensions are not required by law to be disclosed in order for Kinnear to describe and claim his drill bit invention as all Kinnear was required to do, was to disclose his drill bit and the principle upon which his invention operated. Here again, the size of the water courses vary with the capacity of the pump equipment to be used and the depth of the well to be drilled which are varying conditions, and any one skilled in the art of well drilling would construct his bits and the size of the water courses to be used to meet the varying conditions in accordance with the principles shown, described and claimed in the Kinnear patents; that is, *"position the water courses with respect to the cutting elements to directly blast the bottom of the well hole adjacent to the bottom sides of the outer roller cutters during the drilling operations."* Principles such as disclosed by Kinnear in his patent are required under the patent laws and not mechanical dimensions as the *"criteria and tests"* for the "standard of invention" as was held in the Supreme Court case of *Winans v. Denmead* (15 Howard 330-346), 14 L. Ed. 717-24, at page 722; *Cold Metal Process Co. v. Republic Steel Corp.*, 233 F. 2d 828-48, at page 840.

10. The District Court misinterpreted Petitioner's Patents and clearly erred in Finding 56 by stating in part, that,

> "The word 'blast' which is used in the patents in suit to describe the action of the drilling fluid on the bottom of the hole has no particular significance in this art and is not defined in the patents."

There are two outstanding errors in Finding 56, the first being that Finding 56 is in conflict with Finding 32 which finds that from the year 1950 to 1952 that Reed *"liquid blast"* and *"twin blast"* "jet type commercial rock bits" came on the market followed by Hughes "integral jet" rock bits. The significance of the principle of the *"direct blasting action of the fluid on the bottom of the hole"* as shown, described and claimed in the Kinnear Patents has taken on great *"significance"* since the issuance of the Kinnear patents as the principal bit manufacturers even adopted names for their "jet bits" using the word "BLAST" therein to denote the very principle disclosed and claimed as "heart of the Kinnear invention". Therefore, Finding 56 stating that the word "blast" has no significance in the well drilling art is clearly erroneous, as well as, conflicting with Finding 32. The second error in Finding 56 is that the District Court required Kinnear to define the word "blast" which is *"exacting more"* than the patent statutes require, since the word "blast" is a common word and defines a complete "mode of operation" within itself, and as used in the Kinnear Patents as doing and performing useful work by cutting and dislodging a great amount of cuttings from the bottom of the well hole by *fluid blast*. The word "blast" is a common word used in other fields to do and perform useful work such as, atomic blast, dynamite blast, sand blast, etc., as examples. Therefore, the word "blast" as used in the Kinnear Patents is a common word having a definite meaning, and Finding 56 is clearly erroneous in exacting more of the patentee Kinnear than is required by the patent statutes, by requiring the definition of the common word *blast*.

The same bit manufacturers named in Finding 32 and other bit manufacturers advertising their commercial "jet bits" refer to the *"blasting action of the fluid"* shown, described and claimed in the Kinnear Patents as the "MODE OF OPERATION" of their said "jet bits" which can be found in Exhibits P-28, P-71 and P-103, and, had the District Court used the correct "criteria and tests" of invention as to the accused "jet bits" where the advertiser heralded the use of the "heart of the Kinnear invention", as in this instant case, said court should have held the Kinnear Patents valid and infringed as to use by Respondent of said accused "jet bits". Under the circumstances, where an infringer uses an advertised article which *"extolls the virtues"* of the invention claimed in the patents in suit, said infringers have no standing before the court to "deny invention" and "non-infringement" as was held in the cases of ***Wheatley v. Rex-Hide, Inc.***, 7th Cir., 102 F. 2d 940-42 (citing 2nd Cir., decisions); ***Sel-O-Rak Corp. v. Henry Hanger & Display Fixture Corp. of America, et al.***, 5th Cir. (1956), 232 F. 2d 176; ***Cold Metal Process Co., et al. v. Republic Steel Corp.***, 6th Cir., 233 F. 2d 828; ***Schenk v. Diamond Match Co.***, 77 F. 208, 209; ***Motor Improvements v. General Motors Corp.***, 6th Cir. 49 F. 2d 543.

11. The District Court misinterpreted Petitioner's Patents and clearly erred in Finding 65 by stating in part, that,

> "Each of the claims of the reissue patent, when properly construed calls for a drag type blade * * * as an essential element of the claimed combination."

The above Finding 65 is untrue, because the Claims 13-16 of the Kinnear Reissue Patent ***"all"*** use the "GENERIC TERM OR EXPRESSION" roller cutters and "cutting elements" which does not limit the said claims 13-16 to a bit having ***"Drag type blade"*** as incorrectly interpreted by the District Court in Finding 65, whereas the other claims 3-12 and 17-19 do recite "cutting blades", "blade", "forward cutting edges", oppositely arranged cutting blades, and "drag type blade" which are specific terms defining a "drag type blade" as part of the combination claimed in claims 3-12 and 17-19 "ONLY", whereas, the claim

13-16 do not have the limitation of a "drag type blade" as a part of the claimed combination, but, recites the GENERIC TERM OR EXPRESSION *"cutting elements"* which is a broad term or expression which includes any and all kinds of cutting instrumentalities. It is a well settled rule of construction in patent claims that the limitations of particular claims, such as "drag type blade" or words of similar import recited in claims 3-12 and 17-19, cannot be read into other claims of the patent for the purpose of avoiding infringement, such as claims 13-16 which have the "BROAD" generic term or expression "cutting elements" therein which covers and calls for any type cutting instrumentality. *Electric Mach. Mfg. Co. v. General Electric Co.*, 188 F. 2d 11, CCA 2nd Cir. 1937, c.d. 301 U.S. 702, 81 L. Ed. 1357 (1937). And a patentee is not only entitled to narrow claims particularly directed to the preferred embodiment but also to "BROAD CLAIMS" which define the invention without a reference to specific instrumentalities as was held in the case of *American Anode, Inc. v. Lee-Tex Rubber Products Corp.*, (7th Cir. 1943) 136 F. 2d 581-85 at page 585, which cites The Supreme Court case of *Smith v. Snow*, 294 U.S. 1, 55 S. Ct. 279, 79 L. Ed. 721. The law is well settled that a court should never interpret a positively recited GENERIC EXPRESSION (such as "cutting elements" claimed in claims 13-16 of the Kinnear Reissue Patent), as limited to the precise instrumentality disclosed by the patent. *Kennedy, et al. v. Trimble Nurser-Land Furniture Inc.*, (2nd Cir. 1938) 99 F. 2d 786-89, at page 788. Other cases follow, where a positively recited GENERIC EXPRESSION in a patent, are as follows: *International Banding Mach. Co. v. American Bander Co.*, (2nd Cir.) 9 F. 2d 606-608. For other cases on the interpretation or construction to be placed on patent claims reciting GENERIC EXPRESSIONS see Walker on Patents, Deller's Edition, Vol. 2, Sec. 257, page 1233.

There is also error in Finding 65 which is in conflict with Finding 52, because Finding 65 states in part, that,

> "Each of the claims of the reissue patent, when properly construed, call for a drag type blade * * *."

To the contrary Finding 52 in part states, that,

> "There is no mention in either of the patents of drag bits, * * *."

It is obvious that irreconcilable conflict exists in the District Court's interpretation of the Kinnear patents and claims thereof between the Findings 65 and 52 which is misinterpretation of said patents.

12. The District Court misinterpreted Petitioner's Patents and clearly erred in Finding 69 which conflicts with Findings 13, 51 and 52 because Findings 69 states in part, that,

> "Claim 3, 9, 10, 12 and 14 through 19 specify that the flushing fluid issuing from the discharge nozzle is forced between the inner face of a roller cutter and the reduced portion of the bit body through channels or open spaces * * *."

To the contrary Findings 13, 51 and 52 in substance state, that,

> "On the contrary, the drilling fluid discharged from each of the water courses of the bit disclosed in the patents would hit the cutting elements."

This is irreconcilable conflict between Finding 69 which states that the fluid discharges in clear open spaces, whereas Findings 13[illegible]1 and 52 all state that the fluid discharges "onto" the cutters.

13. The District Court misinterpreted Petitioner's Patents and clearly erred in Finding 70 which states in part that,

> "Claims 13 through 16 call for 'outer' roller cutters mounted on the body of the bit which, in view of the drawings and specifications of the patent, means that they are wholly outside the body of the bit."

The above Finding 70 is untrue, because the drawings and specifications of the Kinnear Patents show in Figs. 8, 9 and 10 that the "outer roller cutters numbered 28" are mounted "*wholly within*" the body of the bit as the axle pins 26 on which the outer roller cutters 28 rotate are wholly within the frame of the bit body which is the support for the '*outer*' roller cutters 28.

Attention is directed to Second Petition for Rehearing permitted to be filed July 2, 1959 (R. XVI, Supp. Tr. 3-33) which shows pictures on pages 13, 15 of Wooden Model D-14 that the Court can view which clearly shows that Figs. 8, 9, and 10 of the patent drawings of Kinnear positively shows that the roller cutters 28 are wholly mounted on axles 26 within the body of the bit which proves Finding 70 to be clearly erroneous, because mechanical drawings DO NOT LIE. Finding of fact 70 is artificial rules of interpretation by the District Court of the Kinnear Patents and claims thereof 13-16, and, is inconsistent with the correct tests, criteria and rules of the

Supreme Court which forbids such practice of the Courts below, because the object of the patent law is to secure to inventors a monopoly of what they have actually invented or discovered, and it ought not be defeated by the application of *artificial rules of interpretation* as was stated in the case of *Topliff v. Topliff*, 145 U.S. 156, 171, 36 L. Ed. 658, 12 S. Ct. 825 at page 831.

14. The District Court misinterpreted Petitioner's Patents and clearly erred in Finding 87 which is in conflict with Findings 13, 51 and 52, because Finding 87 states in part, that,

> "The bit is provided with *two pairs* of water courses, one pair directing streams of drilling fluid onto the tops of the outer roller cutters, while the *other pair directs* the stream of drilling *fluid onto the bottom* of the hole *between the cutting edges*. Therefore, the Hughes discloses all of the essential elements arranged in the same relation and performing the same function as the bit disclosed and *claimed* in the Kinnear Patent No. Re. 23,416."

The above in Finding 87 is in conflict with Findings 13, 51 and 52 for example, Finding 52 states in part, that,

> "*There is no suggestion* in either of the patents that any of the water courses should be so positioned that the drilling *fluid* issuing therefrom *would be discharged* so as to miss the *cutters* and strike directly *onto the bottom* of the hole. On the contrary the drilling fluid discharged from each of the water courses of the bit disclosed in the patents *would hit the cutting elements*."

The above quotations show irreconcilable conflict between Finding 87 and Findings 13, 51 and 52, and, is a clear misinterpretation of the Kinnear Patents.

The District Court further misinterpreted the Kinnear Patents and claims thereof in Finding 87, in part quoted above, because none of the claims of the Kinnear Reissue Patent claims "two different pairs of water courses", but to the contrary said reissue patent discloses two pairs of water courses but ONLY claims *"a pair"* of the water courses in the claims of the patent, yet the quotation from Finding 87 above erroneously finds that the claims of the Kinnear patent calls for and claims *"two pair"* of "DIFFERENT WATER COURSES" which is exceptional and glaring error.

It is pointed out above under "I" Fourteen (1-14) reasons including Five (5) conflicts between Findings why the writ should be granted because of "MISINTERPRETATION" by the District Court of Petitioner's Patents which is a question of law, and, The Supreme Court should make the correct interpretation of said patents, because the disclosure in the specification of a patent whose function is to describe and illustrate the invention, *should not be read as* if they were claims whose function is to *exclude* from the patent all that is not specifically claimed. *Marconi Wireless Telegraph Co. of America v. United States*, 320 U.S. 1-80, at Headnote 2, page 23, 87 L. Ed. 1731).

The Appellate Court below clearly erred in making wrong Opinions, Findings, Conclusions and Judgment based thereon, and, "EXACTED MORE" for the "standard of invention" in its interpretation of Petitioner's Patents than is required by the statute to procure and maintain a valid patent, and, used "artificial rules of interpretation", and "wrong criteria and tests" of invention, validity, infringement and comparison of said patents in suit with the prior art, as follows:

The Appellate Court erred by stating in part, that,

> "We do not find it necessary to review each of the numerous findings and conclusions, but pass directly upon a few simple propositions which we find determinative of the result of this appeal."

The few simple propositions passed upon by the Appellate Court are clearly erroneous as pointed out below which leave Petitioner without appellate review of the clearly erroneous Findings of Fact, Conclusions of Law and Judgment based thereon of the District Court below which The Supreme Court is duty bound to pass upon in order to give Petitioner appellate review in this case.

1. The Appellate Court misinterpreted Petitioner's Patents and the claims thereof by stating on page 8 of its opinion, that,

> "Appellant emphasizes that *none of the claims* of the patent include these two smaller ducts. *That is true*, but *neither do any* of the claims *exclude them*."

This quotation from the opinion of the Appellate Court enunciates a NEW LEGAL CONCEPT in patent jurisprudence of the United States which if left to stand uncorrected will wreck the patent system, bring about confusion of legal principles on the correct "criteria and tests" of interpretation of patents amongst the several courts, since said legal opinion is in direct conflict with all correct applicable law on the question presented that has heretofore been settled in other Appellate Courts and The Supreme Court, and, is in direct conflict with recent former decisions of the Fifth Circuit, because the Appellate Court below attempts to write ADDITIONAL parts or elements into the PLAIN AND UNAMBIGUOUS claims of the Kinnear patent by including in said claims "*these two smaller ducts*". This is the same glaring error made by the District Court in Finding 87, as pointed out in reason 14 of "I" above by incorporating "*these two smaller ducts*" which are referred to in Finding 87 as "one pair directing streams of drilling fluid onto the tops of the outer roller cutters." and referred to therein at the end of said Finding 87 as "claimed in the Kinnear Patent No. Re. 23,416." The Appellate Court below ADMITS that "these two smaller ducts" being fluid course ducts 30 in the Kinnear patent are "NOT INCLUDED IN THE CLAIMS" as written, by stating "That is true", but in spite of its own admission that said parts or elements that are not in the Kinnear Patent claims it arbitrarily goes ahead and REWRITES "these two smaller ducts" into the claims of the Kinnear Patent as a part of the combination claimed and allows Respondent to escape infringement by using the "*wrong criteria*" and "misinterpreting" said patent claims, because the claims as written admittedly EXCLUDE "these two smaller ducts" since there is NO AMBIGUITY in the claims as written that would imply other parts or elements disclosed in the specification that could be read into the claims. The Supreme Court forbids the vice indulged in by the Appellate Court below of adding to or detracting from the patent claims, parts or elements NOT

CLAIMED therein thereby changing the contract between the Patentee and the United States which would thwart the statute. This is forbidden as was held by the Supreme Court in the case of *Continental Paper Bag Co. v. Eastern Bag Co.*, 210 U.S. 405-430, (52 L. Ed. 1122) at page 419. A full and correct review of the cases on this subject may be found in (R. XVI, 4423-4546 in Brief of Plaintiff-Appellant In Support of Petition for Rehearing, and R. XVI, 4572-4638, Brief of Plaintiff-Appellant In Support of Petition for Rehearing, and R. XVI, Supp. Tr. 3-33 in Second Petition and Brief For Rehearing).

2. The Appellate Court below used the wrong criteria and tests and misinterpreted Petitioner's Patents on Page 8 of its opinion by stating, that

> "* * *, but that he *did not disclose* the necessity of having the water courses *lined* with *erosion-resistant material*, * * *."

There are two errors in the court's opinion above quoted, the first being that the Kinnear Patents do disclose "*erosion-resistant material*" by stating in Re. Patent 23, 416 in Column 4, lines 28-31, that,

> "*Hard surface material* may be attached to any or all of the cutting elements or *bearing surfaces* in the well known manner."

The District Court in Finding 27 found that "hard surface material" was "erosion-resistant material", also see Exhibit D-148 styled "fusion facts" dated October 1938 which states that "hard surface material" is "erosion resisting material". The bearing surfaces is a broad expression referred to in the above quotation from the specification of the Kinnear Re. Patent No. 23,416, of which Kinnear stated that any or all of the bearing surfaces may have the "hard surface material" attached thereto to prevent erosion, which not only means "lining" the water course or fluid ducts with erosion resisting material but any other bearing surfaces to which it may be necessary to attach the "hard surface material" to prevent erosion. Therefore, the Appellate Court's opinion that Kinnear "did not disclose the necessity of having the water courses *lined* with erosion-resistant material" is clearly erroneous. The Second error of the Appellate Court's opinion above quoted is that the court used the "wrong criteria and tests" and EXACTED MORE than is required by the statute for the *"standard of invention"* to procure and maintain a valid patent, because the patent laws are not concerned with and has nothing to do with the *material with which* or on which the machine operates. The restrictions of the law relate to the useful and novel features of the machine which are described in the claims of the patent; they have nothing to do with the *material used* in the operation of the machine as was held by the Supreme Court in the case of *Motion Pictures Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502-521 at page 512.

3. The Appellate Court below used the wrong criteria and tests and misinterpreted Petitioner's Patents on page 8 of its opinion by stating, that,

> "* * *, but that he did not disclose the necessity * * *, nor of *having all* of the water courses so positioned that the abrasive drilling mud under high pressure would not destroy or damage the cutting elements of the bit."

There are two errors in the above quoted opinion, first the claims of the Kinnear Patent define ONLY a pair of fluid course ducts (water courses) positioned to discharge the drilling fluid to miss the cutting elements and directly blast the bottom of the well hole which construction and arrangement of the parts claimed in combination prevents the abrasive drilling mud under high pressure from destroying or damaging the cutting elements of the bit. Second, the Appellate Court erred and used the wrong criteria and tests to interpret the Kinnear invention by using the SPECIFICATION instead of the CLAIMS to measure the invention, which CLAIMS of the patent EXCLUDE any mention of positioning the water courses to discharge drilling mud *"onto the cutting elements"* of the bit but recite that the fluid discharged through the fluid ducts "directly blast the bottom of the well hole adjacent to the bottom sides of the outer roller cutters during the drilling operation". The claims, rather than the specification or drawing control in determining the scope of a patent as was stated in the case of *Brown v. Brock* (1957, 4th Cir.), 240 F. 2d 723-28 at page 725 citing Supreme Court cases *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 336 U.S. 271-77, 69 S. Ct. 535, 93 L. Ed. 672; *Milcor Steel Co. v. George A. Fuller*, 316 U.S. 143, 145-146, 62 S. Ct. 969, 86 L. Ed. 1332; *General Electric Co. v. Wabash Appliance Corp.*, 304 U.S. 364, 369, 58 S. Ct. 899, 82 L. Ed. 1402.

4. The Appellate Court used the wrong criteria and tests and misinterpreted Petitioner's Patents on page 8 by stating, that.

> "* * *, we are convinced that Kinnear, like many others in the industry, had recognized the importance

> of having the drilling fluid strike directly on the bottom of the well hole."

There are three errors in the court's opinion above, first, the court misinterprets "directly blast" as disclosed and claimed in the Kinnear patents to mean "directly strike". The term "directly blast" as disclosed and claimed in the Kinnear Patents has altogether a different "mode of operation" than the term "directly strike" because, the term "blast" defines a mechanical principle and denotes a step beyond the term "strike" since the term "strike" only means "one object making contact with another" and denotes no further action, while the term "blast" denotes a further *"action and step succeeding"* one object striking the other. For example, "the pilot dropped a bomb which struck the earth and thereafter a blast occurred which dislodged and cut a great amount of earth to form a hole in the earth", therefore, the term "strike" erroneously found by the appellate court does not denote the "mode of operation" of the term "blast" as disclosed and claimed in the Kinnear Patents, whereas, if the bomb ONLY "strikes" the earth and nothing happens thereafter no blast would occur which is the significant further step and, in the law of patents "it is the last step that wins". (*Diamond Rubber Co. v. Consolidated Rubber Tire Co.*, 220 U.S. 428, 31 S. Ct. 44, 55 L. Ed. 527; *Carnegie Steel Co. v. Cambrai Iron Co.*, 183 U.S. 403, 22 S. Ct. 698, 46 L. Ed. 968; *Webster Loom Co. v. Higgins*, 105 U.S. 580, 26 L. Ed. 1177).

The second error of the appellate court in its opinion above quoted, is that Kinnear is not "like many others in the industry" but to the contrary there is no prior art cited by Respondent which discloses or claims the "direct blast" as disclosed and claimed in the Kinnear patents in suit.

The third error is that the appellate court's opinion is in conflict within itself by stating that "Kinnear recognized the importance of having the drilling fluid strike directly on the bottom of the hole" which is in conflict with the court's opinion on page 8 thereafter, that,

> "that the abrasive drilling mud under high pressure would * * * destroy or damage the cutting elements of the bit."

This is irreconcilable conflict and misinterpretation of Petitioner's Patents because the Court holds in one instance that the fluid "strikes directly upon the bottom of the well hole", and, later holds that "abrasive drilling mud under high pressure would damage or destroy the cutting elements of the bit". The two holdings above are inconsistent with each other.

5. The Appellate Court used the wrong criteria and test and misinterpreted Petitioner's Patents by stating on page 9, that

> "The issues are so far flung and broadly drawn, that we have not satisfied ourselves as to the validity of the claims limited to the form of combination bit *shown* in the patent."

In this, the court erred in testing the validity of the patent on what is "*shown*" instead of the correct criteria of what is "claimed" in the patent, because in the law of patents the claims "measure the invention" in order to determine the validity of the claims of the patent, as well as, the scope of the invention claimed. (*Continental Paper Bag Co. v. Eastern Paper Bag Co.*, 210 U.S. 405, 418-420, 52 L. Ed. 1122, 1128, 1129, 28 S. Ct. 748; *Marconi Wireless Telegraph Co. v. United States*, 320 U.S. 1-80 at page 23). The further error in the above holding is that the court being in "doubt" as to the validity of Petitioner's patents used the wrong test in deciding the validity of said patents by affirming the District Court's judgment which held said patents *"invalid and void"*, whereas, when in *"doubt"* the appellate court should have used the correct test and held Petitioner's Patents "VALID" as stated in the case of *Hoeltke v. C. M. Kemp Mfg. Co.*, 80 F. 2d 912-26 (c.d. 298 U.S. 673, 80 L. Ed. 1395, 56 S. Ct. 928) at page 919 citing other Supreme Court and Appellate court cases. And further, since the appellate court states that the issues are so far flung and broadly drawn that it cannot satisfy itself as to the validity of petitioner's patents, then petitioner received no appellate review of the validity of its patents, therefore, it is up to the Supreme Court to grant appellate review of said patents.

6. The Appellate Court made conflicting holdings within its own opinion pertaining to the validity of petitioner's patents by first stating on page [illegible] of its opinion, that,

> "* * * we have not satisfied ourselves as to the validity of the claims * * * shown in the patent."

which holding quoted above is in direct conflict with the appellate court's holding on page 9 of its opinion, that,

> "The judgment of the district court is therefore AFFIRMED."

The judgment of the District Court (R. XVI, 4323) as to the validity of petitioner's patents, states, that,

> "1. That U. S. Patent No. Re. 23,416 is invalid and void;"

This is an irreconcilable conflict within the appellate court's opinion, since the court being in "doubt" cannot hold the patent invalid which the appellate court did by affirming the judgment of the District Court, because the presumption in law is that the patent is prime facie valid on its face until proven invalid and that *"all reasonable doubts"* are held in favor of the validity of the patent attached to legal grant of a patent as the courts are required to do everything in their power to uphold the grant rather than destroy it. Every "reasonable doubt" should have been held against Respondent infringer who assailed the validity of petitioner's patent which the appellate court failed to do. On the above conflict the Supreme Court should grant review, since the appellate court's opinion being "in doubt" as to the validity of petitioner's patents is in conflict with the statute 35 U.S.C. Sec. 282, in conflict with the applicable law of the Supreme Court on "doubt" as held in *Mumm v. Jacob E. Decker & Sons*, 301 U.S. 168, 57 S. Ct. 675, 81 L. Ed. 983; *Radio Corp. of America v. Radio Engineering Lab., Inc.*, 293 U.S. 1, 55 S. Ct. 928, U.S. 350, 37 S. Ct. 169, 61 L. Ed. 356; *Barbed Wire* Patent (*Washburn & Moen Mfg. Co. v. Beat Em All Barbed Wire Co.*, 143 U.S. 275, 12 S. Ct. 443, 36 L. Ed. 154; *Cantrell v. Wallick*, 117 U.S. 689, 6 S. Ct. 970, 29 L. Ed. 1017, and, further the Court's opinion in the instant case is in conflict with the recent former decision of the Fifth Circuit on the question of doubt of validity in the case of *Cameron Iron Works v. Stekoll* (5th Cir. 1957), 242 F. 2d 17-22.

7. The Appellate Court in its opinion of September 22, 1958 on page 8 thereof misinterpreted Petitioner's Patents and "measures the validity of the patent by what is shown in the patent", whereas, in its opinion of April 30, 1959 ON PETITION FOR REHEARING the appellate court "measures infringement by what is claimed in the patent", which is in conflict of decision by erroneously using opposite "criteria and tests" on the question of what is shown to determine validity, and, on the question of what is claimed to determine infringement of petitioner's patents, because one cannot construe his claims with reference to his drawings and specifications in order to escape invalidity, and then in the next breath seek to disregard the drawings and the specifications in order to spell out infringement. *Wire Tie Mach. Co. v. Pacific*, 9th Cir. 1939, 107 F. 2d 54; *Emery Industries, Inc. v. Schumann*, 7th Cir. 1940, 11 F. 2d 209; *Western States Mach. Co. v. S. S. Hepworth Co.*, 2d Cir. 1945, 147 F. 2d 345, c.d 325 U.S. 873, 89 L. Ed. 1881).

8. The Appellate Court in its opinion of September 22, 1958 and April 30, 1959 used the wrong criteria and tests, and, misinterpreted Petitioner's Patents by holding and deciding, that,

> "For the purpose of this case, it is enough to hold, as we do, that the claims must be so limited to a combination bit construed substantially in accordance with the drawings and descriptive language in the patent specification."

PER CURIAM:

> "In our opinion, the claims themselves of the reissue patent are limited to a combination rotary drilling tool, bit, or drill, and the patent has not been infringed by the appellee."

The Court's holdings above quoted are clearly erroneous, because claims 3-12 and 17-19 define a combination bit which has roller cutters and one or more blade type cutters in combination mounted on the bit or body which agrees with that part of the District Court's Finding 10, as follows:

> "10. Combination bits have both roller cutters and one or more blade-type cutters,"

While claims 3-12 and 17-19 define a combination bit, both court's clearly erred in reading into the claims 13-16 the limitations of a "blade", because claims 13-16 are BROAD GENERIC CLAIMS reciting "roller cutters" and "*cutting elements*" in combination as the cutters of the bit. Therefore, there are two different sets of claims in the Kinnear patents, one set of claims 3-12 and 17-19 drawn to a combination bit, and the other set of claims 13-16 being drawn to include either a combination bit or an ALL ROLLER CUTTER ROCK BIT since the term "*cutting elements*" used in claims 13-16 means any kind of cutting instrumentality on the bit body which includes "roller cutting elements" for an ALL ROLLER CUTTER ROCK BIT which is particularly set out in OBJECT OF THE INVENTION 7, 9, and 10, Columns 1 and 2 of both the original and reissue patents, and also shown in the drawings in Figs. 8, 9, and 10 of said patents. It is therefore clearly erroneous for both courts below to find that the claims of the Kinnear patent are "*limited to a combination bit*". It is a settled rule of construction that the "limitations" of particular claims cannot be read into other claims for the purpose of avoiding infringement. (*Electric Mach. Mfg. Co. v. General Electric Co.*, 2d Cir. 1937, 88 F. 2d 11, c.d. 301 U.S. 702, 81 L. Ed. 1357. Where there are two different sets of claims, that is, broad and narrow claims, the court will not read into the broad claims a "limitation" not expressed but which is expressed in the narrow claims, to do so would be changing the contract between the public and the patentee. (*Kennedy v. Trimble*, 2d Cir. 1938, 99 F. 2d 786; *Chamberlain v. Barringer*, 6th Cir. 1939, 105 F. 2d 880). And a patentee is "*not only*" entitled to narrow claims particularly directed to the preferred embodiment but also to "BROAD CLAIMS" which define the invention without a reference to specific instrumentalities as was held in the case of *American Anode, Inc. v. Lee-Tex Rubber Products Corp.*, 7th Cir. 1943, 136 F. 2d 581-585 at page 585, which cites The Supreme Court case of *Smith v. Snow*, 294 U.S. 1, 55 S. Ct. 279, 79 L. Ed. 721. The law is well settled that a court should never interpret a positively recited "GENERIC EXPRESSION" (such as "cutting elements" claimed in claims 13-16 of the Kinnear Reissue Patent), as limited to the precise instrumentality disclosed by the patents. *International Banding Mach. Co. v. American Bander Co.*, 2d Cir., 9 F. 2d 606-608; for other cases on the interpretation or construction to place on patent claims reciting GENERIC EXPRESSIONS see Walker on Patents, Deller's Edition, Vol. 2, Sec. 257, page 1233.

9. Both courts below used the wrong tests of the Doctrine of "Commercial Success" pertaining to Petitioner's Patents, because said patents are entitled to the doctrine of commercial success since defendant admits by admissions and judicial admissions that "jet bits" made and used under the Kinnear patents are of great commercial success.

a. Defendant's admissions and judicial admissions can be found in Respondent's Written Answer No. 2 to Petitioner's Written Interrogatories No. 2 (R. I, 124-25);

b. Defendant's Letter Exhibit D-28 stating that Respondent used the Kinnear bits under Reissue Patent No. 23,416 and by doing so recognized the validity of Petitioner's Patents and said patents "commercial success";

c. Further "commercial success" of Kinnear patents can be found in Exhibits P-18, P-56, P-62, P-65, P-102;

d. Also see Affidavit and Exhibits attached thereto (R. XVI Supplement Tr. typewritten pages 1-23);

e. W. F. Weed deposition testimony read into record by Respondent's Counsel (R. IV, 892) where Respondent purchased and used bits sold by licensees under the Kinnear patents from A-1 Bit & Tool Company as per license Exhibit P-62 for which Respondent knew that Petitioner Licensor was receiving substantial royalties from bits purchased and used by Respondent.

Evidence of "commercial success" should have been considered as bearing on the question of invention which both courts below failed to do, but erroneously held that Petitioner's patents did not achieve "commercial success" and that the "Doctrine of Commercial Success" has no application to the facts of this case, thereby both courts below refused to correctly apply the Doctrine of Commercial Success. (*Tempo Electric Motor Co. v. Apco Co.*, 275 U.S. 319, 48 S. Ct. 170, 72 L. Ed. 298).

10. Both courts below used the wrong test in interpreting invention in Petitioner's Patents where the "jet bits" disclosed and claimed in the Kinnear patents REVOLUTIONIZED the oil well drilling industry, which industry discarded the old "Prior Art Bits" and changed over and quickly adopted the new "jet bits". The record shows and Respondent admits by its own testimony and documentary records taken from its files, that Respondent and the entire oil well drilling industry changed over from the old prior art bits to the new "jet bits", as follows:

a. Testimony of Ragland Chief Petroleum Engineer of Respondent (R. II, 457-58);

b. Respondent's Documentary evidence being Exhibits P-16, P-20, P-26, P-44, P-45, P-46, P-63 and D-9; For example, Exhibit P-20 being Humble-Way Magazine, page 17; column 3 in paragraph 3 in part states, that

> "*A small change*, this *but it works wonders* with drilling efficiency. There is no recutting of the cuttings and hence less tendency for the bit to ball up."

P-20 Humble-Way Magazine, page 18, states in part, that

> "The new drag bit lost little time in making a name for itself. It was used to drill up to 5 *times faster* than *conventional bits* through shales and sands of the Gulf Coast."

D-9 Respondent's Engineering Paper styled,

"RESULTS OBTAINED WITH HIGH-NOZZLE-FLUID-VELOCITY ROTARY BITS", page 2, introduction or first paragraph, lines 7-12 states that,

> "On the basis of this finding, a *radical new design* of drag-type bit was evolved and placed on the market by several bit manufacturers under the general *designation "jet-type bit"*. During the *last six months, jet-type bits* have been *used extensively in Humble's* drilling operations.

> P-44 Respondent's Engineering Reports, Col. '23, Number 3, page 15, paragraph 5, pertaining to "jet bits" states,

> "THE JET BIT—High velocity jet bits are now being sold by many bit manufacturers. The ordinary conventional bit has been *slightly changed* to realize this *revolutionary idea.*"

Where a patented device has REVOLUTIONIZED the industry as attested to by Respondent's writings and admissions above quoted, this is not only the correct guide for the court to test *"invention"* of the Kinnear patented "jet bit", but is a further guide to the court to allow *"liberal construction"* to be given to the claims of said Kinnear patents as was held in *Palmer v. Ludens*, 3rd Cir. 1956, 236 F. 2d 496; *Diamond Rubber Co. v. Consolidated Rubber Tire Co.*, 220 U.S. 428, 31 S. Ct. 444, 55 L. Ed. 527; *Cold Metal Process Co. v. Republic Steel Corp.*, c.' 297 U.S. 675, 78 L. Ed. 1064, 54 S. Ct. 530; 233 F. 2d 828, at page 837. *Sel-O-Rak Corp. v. Henry Hanger & Display Fix Corp.*, 5th Cir. 1956, 232 F. 2d 176, at page 178.

11. Both courts below used the wrong tests as to invention in Petitioner's Patents pertaining to the "jet bit" which produces the results of the technique of "jet drilling" by both courts holding that Respondent developed the *"technique of jet drilling"*. The District Court held in Findings 26, and 28, that,

> "26. The technique of 'jet drilling' was developed by defendant * * * research program * * * was commenced in 1943, was formalized as Research Project 4025 on January 1, 1946."
>
> "28. * * * These bits obtained and used by defendant commenced in 1946, were the first of the so-called 'jet' bits."

These Findings 26 and 28 are untrue, because the Kinnear "jet bit" patents show on their face to have been filed in the U. S. Patent Office Jan. 2, 1942 which actually is the first of the "so-called jet bits".

The Appellate Court on page 6 last paragraph of its opinion held, that

> "During the ten-year interval the technique of jet drilling had been fully developed by the appellee. * * *."

The above quoted findings of both court are untrue, because the "technique of jet drilling" is nothing but the result of the "use" or "method of operating the jet bit", and, both courts used the wrong criteria and tests in making these determinations by their findings since the first inventor or designer of the "jet bit" who made or disclosed the structure of "jet bits" made possible the new and different method of "jet drilling". Kinnear was not only the FIRST INVENTOR of "jet bits" but taught Respondent and its drilling personnel and engineers by use of the FIRST JET BIT in the actual drilling of Respondent's wells beginning in the year 1945 as set out by Bit Invoice Ticket Exhibit P-56 signed by drilling personnel of Respondent, long before Respondent made and used its own first "jet bit" in Sept. 1946 as per Respondent's Written Answer No. 18 (b) in response to Petitioner's Written Interrogatories No. 18 (b) found in R. I, 144.

Respondent admits by judicial admissions it did not invent the "jet bit", did not make drawings of the jet bit, and that the jet bit was developed by others, as follows:

> Defendant's Written Answers to Plaintiff's Written Interrogatories of July 21, 1954, Answers: No. 18 3rd unnumbered paragraph states in part, "Defendant does not contend that it invented any bit"; No. 18-(h), (i), and (j), "Defendant made no drawings of the so-called "jet-type drilling bit"; No. 21-(h) and (i), "Defendant does not contend that it invented any "jet bit"; "The drilling technique resulting from the research project resulted in the development by others of what is now commonly termed the "jet rock bit"; No. 28-(g), "Defendant does not at this time contend to be the inventor of any jet drilling bit."

By the above quoted judicial admissions of Respondent in its Answer to the Interrogatories, that it did not invent, design by drawings and admitted that others developed the "jet bit" makes the decisions of both courts below inconsistent and therefore clearly erroneous. The inventor and designer of the structure of the "jet bit" developed the method of "jet drilling" and the applicable law is stated in an analogous situation as held in the case of *Ric-Wil Co. v. E. B. Kaiser Co.*, 179 F.2d 401-08, at page 405, c.d. 339 U.S. 958.

12. Part (3) on page 4 of the opinion of the Appellate Court states that the District Court describes a true "jet bit" as,

> "(3) water courses so positioned that the high velocity fluid issuing therefrom will not destroy or damage the cutting elements of the bit through erosion, which means, as a practical matter, that the streams of drilling fluid issuing from the water courses should not strike the cutting elements of the bit."

No where in part (3) above, nor in parts (1) or (2) of the definition of the District Court of true "jet bit" does said definition state "that the drilling fluid issuing from the water courses *must* and *will* blast the bottom of the hole". Furthermore, said definition NO WHERE states "that the drilling fluid blasts the bottom of the hole, and particularly in the OUTER bottom portion of the well hole". The definition is incorrect because it is INCOMPLETE in that, it does not even state where the fluid would go, that is, in what direction or where it would finally be delivered, and therefore, could not, and does not teach that the fluid issuing from the water courses of the bit would act upon any surfaces of the hole, or, just discharge into the open hole without doing any *"useful work"*. For the "high velocity fluid to do and perform *"useful work"* as in a true "jet bit" it MUST blast the BOTTOM PORTION OF THE WELL HOLE, and to "blast" it must have LINE OF ACTION, and, to "blast" in the OUTER BOTTOM PORTION OF THE WELL HOLE to remove the cuttings cut by the cutting elements of the bit to prevent the bit from BALLING-UP the *"Hydraulic Structure"* of the bit MUST have LINE OF DIRECTION. LINE OF ACTION and LINE OF DIRECTION are lacking in the definition of the District Court, but, is very completely defined in the specification and patent claims of the Kinnear Patent which is a *"true"* jet bit, for example, states,

> "said discharge ends (meaning ends of fluid ducts) being positioned and directed outwardly from the center line of the bit to discharge streams of high pressure fluid directly against the bottom of the well adjacent to the bottom sides of said outer roller cutters during the drilling operations."

The LINE OF ACTION and LINE OF DIRECTION are FACTORS that are "Fundamental in the Law of Physics" and the structure of a "true" jet bit MUST have its structure so constructed and arranged in the bit, that the same provides "positioning of the ducts with respect to the cutting elements of the bit" in order to provide LINE OF ACTION "being the *distance the fluid travels* from the *discharge ends of the ducts* to the *bottom* of the hole", and, LINE OF DIRECTION "being the *direction the fluid travels* from the discharge ends of the ducts to discharge streams of high pressure fluid *directly against the bottom* of the well *adjacent* to the bottom sides of said *outer* roller cutter during the drilling operations". LINE OF ACTION and LINE OF DIRECTION are essential and requisite FACTORS to be incorporated into the *"Hydraulic Structure"* of a true "jet bit" to be able to utilize these factors in a hydraulic rotary bit. This is the "HEART OF THE KINNEAR JET BIT" invention adapted to solve the age old problem in rotary bits to prevent the bit from BALLING-UP which problem has plagued the industry since the inception and use of rotary bits. (See pages 47-53 REPLY BRIEF OF PLAINTIFF-APPELLANT IN SUPPORT OF PETITION FOR REHEARING on this subject). The universally accepted statement on these FACTORS in the Law of Physics is as follows:

> Forces, like velocities and acceleration are quantities in which DIRECTION is a FACTOR, i.e., their complete determination requires not only a STATEMENT of their magnitudes but also their LINE OF ACTION AND DIRECTION." (Quotation from Mark's Mechanical Engineering Handbook; Fifth Edition, at Page 486).

From the above, it is not only OBVIOUS that the definition of the District Court of a true "jet bit" is incorrect, but that it is incorrect in three (3) vital respects, because said definition does not provide for the complete structure of a "jet bit", that is the necessary relationship of the "Hydraulic Structure" of the bit with respect to the "Cutting Structure" of the bit, as follows:

1. LINE OF ACTION (distance of travel from duct to bottom to blast)
2. LINE OF DIRECTION (duct positioned to direct fluid to bottom)
3. LINE OF DIRECTION (duct positioned to direct fliud to OUTER bottom portion of the well hole to blast bottom to quickly remove cuttings to prevent BALL-UP of the bit.

The definition of the District Court of a true "jet bit" is a glaring and exceptional error and shows that neither the District Court or the Appellate Court knows what a true "jet bit" is, or, how to interpret the Kinnear "jet bit" Patent and the claims thereof, particularly claims 13-18, and this being so material in order to apply the correct test and "standard of invention" in this case, is further reason why the writ should be granted to review this case.

15. The Appellate Court failed and refused to pass upon the "standard of invention" pertaining to the VALIDITY of Petitioner's Patents by stating that,

> "That finding is not essential to the disposition of the issues in this case."

The issue of validity of Petitioner's Patents was raised by Respondent in its Answer to the Complaint and passed upon by the District Court which held Petitioner's Patent invalid and void, yet the Appellate Court refused to pass upon the issue of validity of said patents although this issue was presented on appeal to the Appellate Court and which is a question the appellate court must decide once that question is raised because it is the *"standard of invention"* that controls, which is a "CONSTITUTIONAL QUESTION" that must be decided, and, no finding of fact can be substituted for it in any case. Due to the fact that the Appellate Court did not rule upon "the standard of invention" as the CONSTITUTIONAL TEST as to the VALIDITY of Petitiaoner's Patents the Supreme Court should grant the writ and rule on the validity of Petitioner's Patents in order to afford Petitioner appellate review. *(Greater A & P Tea Co. v. Supermarket Equip. Corp.*, (1950) 340 U.S. 147-159).

Under "I" Petitioner has pointed out 14 reasons and 5 conflicts of the Findings of Fact, Conclusions of Law and Judgment of the District Court why the writ should be granted, and, 13 reasons and 3 conflicts of the decision and judgment of the Appellate Court why the writ should be granted, as it has been shown that very obvious and exceptional errors have been made by both courts below and under such circumstances the review should be had by The Supreme Court. *(Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 336 U.S. 271, 275, 93 L.Ed. 672, 677, 69 S.Ct. 535).

II.

The Findings of Fact, Conclusions of Law and Judgment of the District Court below which held Petitioner's Patents invalid and void are in conflict with the Findings of Fact, Conclusions of Law and Judgment of the United States District Court for the District of Columbia which held Petitioner's Patent claims patentable, defined invention and valid in the Findings 5 and 10 which states,

> "5. Had the record of the original application been correct it is reasonable to infer that plaintiff would have given his attention to the perfection of valid claims on his disclosure for the entire construction of the drill which is now found to be patentable."

> "10. A comparison of the specification of the original patent with the claims of the reissue application clearly discloses that the latter are for the same invention intended to be secured by the original patent."

And, Conclusions of Law 8 states,

> "8. The reissue claims are for the same invention as the original patent, being the same invention intended to be secured by the original patent as disclosed in the specification of the original patent."

And, the Judgment states, in part, that,

> "Adjudged, that plaintiff is entitled, according to law to receive a patent to his invention * * *."

Although the opinion of the United States District Court for the District of Columbia, 95 F.Supp. 55 stated in said opinion dated Jan. 23, 1951 in part, that,

> "There is also no dispute as to the patentability of plaintiff's claims, and that question is not before me."

However, in the said court's Findings of Fact, Conclusions of Law and Judgment made later and dated Feb. 9, 1951 said Court held the patents claims of Kinnear to be PATENTABLE, VALID and DEFINED INVENTION as per said court's findings, conclusions and Judgment quoted above. In the appeal from the decisions of the Patent Office refusing to grant the claims in the reissue application for patent, the Patent Office in its ANSWER TO COMPLAINT of Kinnear before the U. S. District Court for the District of Columbia raised the issue of patentability, invention and validity of said patent claims which said court passed upon in its final decision in the Findings of Fact, Conclusions of Law and Judgment as above quoted in part.

The Kinnear application for patent not only had a contest in the Patent Office but had a contest before the Unitied States District Court for the District of Columbia which greatly strengthens the VALIDITY OF Petitioner's Patents, which both courts below failed to recognize. (*Hoeltke v. C. M. Kemp Mfg. Co.*, 4th Cir., 80 F.2d 912-26 at page 919, c.d. 298 U.S. 673, 80 L.Ed. 1395, 56 S.Ct. 928; citing the Supreme Court Case of *Hildreth v. Mastoras*, 275 U.S. 27-32, 42 S.Ct. 20, 66 L.Ed. 112).

The prior art patents cited by the Patent Office against Kinnear are printed on last page of Kinnear Re. 23,416, which prior art described drill bits stating that the drilling fluid would "strike directly upon the bottom of the well hole" but Kinnear overrode the principle prior art relied upon by the Patent Office and Patent Office granted Kinnear claims on the structure of his bit defining the "positioning" of the fluid course ducts with respect to the cutting elements of the bit whereby the drilling fluid is discharged "to directly blast the bottom of the well hole" which is a different "MODE OF OPERATION" than the prior art bits cited by the Patent Office which only disclose "positioning" of the water courses to permit the drilling fluid to directly strike the bottom of the well hole". The PRESUMPTION OF VALIDITY OF A PATENT IS GREATLY STRENGTHENED when the principle art relied upon has been considered and rejected by the patent office as held in the cases of *Hunt, et al. v. Armour & Co.*, 7th Cir., 185 F.2d 722, at page 726; *Lewyt Corp. v. Health-Mor, Inc.*, 7th Cir., 181 F.2d 855-57, (c.d. 340 U.S. 823, 95 L.Ed. 605, 70 S.Ct. 57). Both courts below failed to follow the above doctrine of the law and erroneously invalidated Petitioner's Patents.

III.

The District Court invalidated Petitioner's Patents, and, the Appellate Court "could not satisfy itself as to the validity of the claims of said patent" which allows the District Court to be a court of last resort on the question of "validity of a patent" without appellate review. This is thought to be a case of first impression on the question presented where a litigant was refused "appellate review" where the issue was before the appellate court and presented for review but the appellate court refused to pass upon the issue presented.

IV.

There are three (3) irreconcilable conflicts within the opinions and judgment of the Appellate Court as set out in I under REASONS FOR GRANTING THE WRIT which will not support the judgment of the Appellate Court or the District Court.

V.

There are five (5) irreconcilable conflicts within the Findings of Fact, Conclusions of Law and Judgment thereon as set out in I under REASONS FOR GRANTING THE WRIT which will not support the Judgment of the District Court.

VI.

The Findings of Fact, Conclusions of Law; Opinions and Judgments of both courts below in this case are clearly erroneous and conflict with the applicable law of other federal courts and of The Supreme Court on all the questions presented in the application for the writ, which are glaring and exceptional errors that should be settled by The Supreme Court.

VII.

Both courts below based their decisions, opinions and judgments on the theory and premise that all claims in the complaint charged to Respondent by Petitioner involve and are inextricably connected with Petitioner's Patents. Petitioner has pointed out in I under REASONS FOR GRANTING THE WRIT that the District Court made fourteen (14) exceptional errors and five (5) conflicts, and, the Appellate Court made thirteen (13) exceptional errors and three (3) conflicts which will not support either judgment below and since all decisions, opinions and judgments are permeated with error Petitioner is entitled to review by the Supreme Court of the entire case.

VIII.

The Appellate court did not pass upon the numerous Findings of Fact and Conclusions of Law of the District Court but passed directly upon a few simple propositions which it found determinative of the issues of the appeal, which few simple propositions are clearly erroneous and leaves Petitioner adrift without relief or remedy on all questions presented.

IX.

The Appellate Court's Opinions overruled the District Court on the interpretation of Petitioner's Patents as set out in I under REASONS FOR GRANTING THE WRIT, and therefore rendered "void" all of the District Court's Finding of Fact, Conclusions of Law and Judgment based thereon pertaining to Petitioner's Patents, from which Respondent failed to timely take an appeal or apply for Writ of Certiorari, to the Supreme Court on the Appellate Court's Opinions, therefore, Respondent is now precluded from urging the District Court's said Findings, Conclusions and Judgment based on or pertaining to

Petitioner's Patents before The Supreme Court, because the Appellate Court's Opinions reversing the District Court on the interpretation of Petitioner's Patents is FINAL and Res Adjudicata as far as Respondent is concerned, which greatly lessens the burden of the Supreme Court of reviewing the numerous erroneous Findings, Conclusions and Judgment of the District Court.

X.

Both courts below failed to follow the statute 35 U.S.C. Sec. 282 which provides, that

> "Sec. 282. Presumption of validity;
>
> "A patent shall be presumed valid. The burden of establishing invalidity of a patent shall rest on a party asserting it."

The above quoted statute and the established rules of evidence by the courts requires that "every reasonable doubt" will be held against a party asserting invalidity of a patent. Respondent's ONLY witness CHESNUT could not, and did not, discharge the "burden of proof" on the question of invalidity, and who testified that "*not any of the prior art*" cited by Respondent SINGULARLY could meet "ANY OF THE CLAIMS 3-20" defined in the Kinnear Patent Re. 23,416 (R. XIII, 3384-91 and R. XIV, 3773-3863. (Pertinent excerpts of said testimony is set out in pages 40-62 of the 369 page Brief of Plaintiff-Appellant dated Nov. 27, 1957 and filed Nov. 29, 1957 with the Appellate Court below a certified copy and 9 additional copies of which are filed with The Supreme Court.) Both courts below did everything in their power to "destroy" the Kinnear Patents, instead of using the correct "criteria and test" of the law which requires the courts to do everything in their power to "uphold" the patent grant. Instead of Respondent discharging the "burden of proof" to establish invalidity of said Kinnear Patents Respondent's through its only witnesses wholly failed to do so, but made the damaging ADMISSIONS against interest that "NOT ONE SINGLE PRIOR ART REFERENCE" could meet *"any of the claims 3-20* of the Kinnear Patent". The correct crietria and test that both courts below failed to follow on "burden of proof" is set out in the cases as follows. *Charles Peckat Mfg. Co., et al. v. Jacobs*, 178 Fed. 2d 794 at 801, said (cert. denied: 70 S. Ct. 575, 339 U.S. 915):

> "The patent was allowed promptly, endowed, of course, with the presumption of validity. As Mr. Justice Cardozo remarked in Radio Corporation of America v. Radio Laboratories, 293 U.S. 1, 7, 55 S. Ct. 928, 931, 79 L. Ed. 163. * * *"

The Appellate Court below in its Opinion of Sept. 22, 1958 on page 9 thereof states,

> "The issues are so far flung and broadly drawn that we ~~are~~ have not satisfied ourselves as to the validity of the claims * * * in the patent."

Yet, being *"in doubt"* as to the validity of Petitioner's patent the Appellate Court AFFIRMED the Judgment of the District Court which held Petitioner's Patents *"invalid and void"*. This is prejudice and discrimination practiced against Petitioner and for Respondent.

XI.

Both courts below without ANY EVIDENCE of proof whatsoever, made Findings of Fact, Conclusions, Opinions and Judgments and ~~thereby~~ used the wrong standards and tests in deciding for Respondent while disregarding Respondent's admissions and judicial admissions contra thereto, for example,

1. Respondent's paragraph XXI and XXII in Answer to Petitioner's Complaint, together with Respondent's Answers No. 1 and 17 in response to Petitioner's Written Interrogatories Nos. 1 and 17, in which, Respondent's admits, by claiming a license under Petitioner's Kinnear Patents by use of the "*accused jet bits*", which accused jet bits are admitted to be for the "*same inventions*" claimed in said patents, which is also an admission of infringement, because Respondent failed to prove that it had gained intervening rights under the Kinnear Patents.

2. Respondent came later in making and using its own "jet bits" than the filing dates of both original and reissue applications for patents, and, Finding 28 states Respondent's use in 1946 to be EXPERIMENTAL, which date actually was Sept. 1946 according to Respondent's Answer No. 18 in response to Petitioner's Interrogatory No. 18 and under such circumstances Respondent's affirmative defense of intervening rights fails as stated in the Supreme Court cases of: ((U. S. Industrial Chemicals, Inc. v. Carbide & Carbon Chemicals Corp., (1942) 315 U.S. 667, 675, (86 L. Ed. 1105, 62 S. Ct. 839-843) at page 669; Sontag Chain Stores Co. v. National Nut Co., 310 U.S. 281, 84 L. Ed. 1201, 60 S. Ct. 961).

The fact that Respondent failed to make good its affirmative defense of intervening rights does not relieve Respondent of the *"judicial admissions"* that the "accused jet bits" which Respondent admits it used as being for the *"same inventions"* claimed in the Kinnear Patent as per paragraphs XXI and XXII in Respondent's Answer to the Complaint and Respondent's written Answers to Petitioner's Interrogatories Nos. 1, 17 and 18 predicated upon Respondent's said Answer XXI and XXII to the Complaint, which are binding admissions upon Respondent that the Kinnear Patents show, describe and claim "jet-bits" which are the SAME as the "accused jet bits" designated as "jet bits" in said Answers to said Interrogatories. That which a Defendant admits in his Answer to a Complaint is binding admission upon him as was held in the case of *Freedom National Bank v. Northern Illinois Corp.*, 7th Cir. 1953, 202 F. 2d 601-06, at pages 605-606. Further Respondent ADMITS Petitioner's Patents are *"valid"* by claiming intervening rights under said patents and amounts to a license by adopting the theory of ESTOPPEL to support a private intervening right in the nature of a LICENSE against a generally valid reissue patent, because Respondent could not gain a license by private intervening rights if Petitioner's reissue patent were invalid. Ashland Fire Brick Co. v. General Refractories Co., 6th Cir., (1928) 27 F. 2d 744, 747, (c.d. 278 U.S. 622, 73 L. Ed. 569, 49 S. Ct. 7 at page 746.

3. Counsel for Respondent made judicial admissions binding upon Respondent, that any and all documents taken from Respondent's files are vouched for as being authentic records and documents of Respondent and that Respondent "would not retract therefrom" statements made therein (R. III, 778-80). For example, documents taken from Respondent's files and records are: Exhibits P-16,

P-20, P-26, P-30, P-31, P-39, P-44, P-45, P-46, -63, D-9, D-13 and D-28.

4. Admissions against interest of Respondent by its witnesses, Ragland, Reistle, Gannon, Wilde, T. V. Moore, Eckel, Bielstein, Nolley, Scott, Payne, and Chestnut.
5. The District Court erroneously made Conclusion of Law 1(d) pertaining to Texas Two (2) year statute of Limitations thereby barring Petitioner's Claims charged against Respondent of violating Kinnear's Confidence by appropriating his "Trade Secrets", because there is no evidence that Kinnear or Petitioner had any knowledge of such violations until less than 1 year before suit. Violation of Confidential Relationship is "*fraud on its face*" if any Texas Statute of Limitation would apply it would be the Texas Four (4) year statute, Art. 5529 (Appendix A-3) instead of the Texas Two (2) year statute, Art. 5526 (Appendix A-3). (*Burham v. Todd*, 5th Cir., 9 F. 2d 338, at page 343; *Phillips Petroleum Co. v. Johnson*, 5th Cir. 155 F. 2d 185, at page 191, c.d. 329 U.S. 730, 91 L. Ed. 632, 67 S. Ct. 44; Supreme Court of Texas, *Peck v. Berry*, 184 S.W. 2d 272, at page 275).

XII.

Both courts below used the wrong standards and tests and had no evidence to support their Findings of Fact, Conclusions of Law, Opinions and Judgment in deciding Petitioner's Claims of Violation of Confidential Relationship pertaining to disclosures of Petitioner's "Trade Secrets" charged against Respondent, because

1. The District Court based its decision on the premise an theory that Petitioner's Claims of Violation of

Confidential Relationship "involve and are inextricably connected with Petitioner's Patents" as per Finding 3, whereas, Petitioner's Claims of Violation of Confidential Relationship have nothing to do with Petitioner's Patents but said claims are based upon Respondent's APPROPRIATION of Petitioner's "Trade Secrets" which were used by Respondent to unjustly enrich itself, per District Court's Finding 15.

2. The appellate court below on page 9 of its decisions agrees with the District Court's disposition of Petitioner's Claims of Violation of Confidential Relationship and thereby made the same error as 1 above of the District Court.

XIII.

Both courts below used the wrong standards and tests and had no evidence to support their Findings of Fact, Conclusions of Law, Opinions and Judgments in deciding Petitioner's Claims of Unjust Enrichment, charged against Respondent, because

1. Both Court's misinterpreted Petitioner's Patents and therefore would have no basis to predicate their decisions and judgments upon "Unjust Enrichment" of Respondent's infringing uses of the inventions claimed in Petitioner's Patents thereby unjustly enriching itself at the expense of Petitioner. (*Amusement Corp. of America v. Matson*, 5th Cir. 1943, 38 F. 2d 693-97, at page 696).
2. Respondent unjustly enriched itself by APPROPRIATION of Petitioner's "Trade Secrets" which were disclosed to Respondent's Chief Engineer Ragland (R. II, 294-95, 303-04, and R. III, 577), in which Ragland admits that C. W. Kinnear dis-

closed full information of bit and invention thereon during the pendency of the original application for patent and before its issuance, together with a WOODEN MODEL, P-9 of his bit and BLUE PRINTS, P-10, thru P-14, per District Court's Finding 15, being detailed machine shop drawings of how to construct his bit, and, "Technical Know How" furnished by C. W. Kinnear to Respondent thru its Engineers and Drilling Personnel by going out on Respondent's drilling rigs and personally acted as a driller in demonstrating the use of his "jet bit" and utilizing the available rigs horsepower by COMPOUNDING THE PUMPS with no new equipment added to practice and teach the practice of what is now called "jet drilling" (Kinnear R. IX, 2237) and Exhibit P-32 furnished Respondent by C. W. Kinnear referring to the "RESULTS OBTAINED" by "Compounding Pumps" used in connection with "jet bits" to acquire the necessary fluid velocity to practice "jet drilling" in drilling Respondent's wells as per Bit Invoice Tickets, Exhibits P-56.

3. Respondent "unjustly enriched" itself by selling Kinnear's Trade Secrets obtained in confidence from Kinnear and sold the same—as Respondent's own through Respondent's Engineering Reports P-26, P-44, P-45, and P-46 to The Standard Oil Company (N.J.), its associates and affiliated companies and Standard Oil Development Company under Agreements, Exhibits P-21 and P-22.

XIV.

Both courts below used the wrong standard and tests and had no evidence to support their Findings of Fact, Conclusions of Law, Opinions and Judgments in deciding Petitioner's Claims of Unfair Competition and Unfair Trade Practices charged against Respondent, because

1. Respondent misrepresented to the oil well industry and the public that Respondent was the "Progenitor", "Developer" and "Originator of jet bits" and "jet drilling" as per Respondent's Chief Petroleum Engineer Ragland (R. II, 293-95, 415-20, 453-54) and Exhibits P-16, P-20, P-26, P-44, P-45, P-46, P-47, P-63 and D-9.

2. Respondent made illegal agreements with the Bit manufacturers to manufacture and sell the inventions contained in the Kinnear Patents without consent or authority of the owner of said patents as per Ragland's testimony (R. II, 293-95, 415-20, 453-54) and Exhibits P-16, P-20, P-21, P-22, P-26, P-44, P-45, P-46, P-47 and D-9 and, Kinnear Blue Prints P-10 thru P-14 being detailed Machine Shop Drawings on how to construct a "jet bit".

3. Respondent made illegal agreements by passing, bartering, selling and trading in Petitioner's "jet bits" inventions and "Trade Secrets" with Standard Oil Development Company, Standard Oil Company (N.J.) subsidiary and affiliated companies through Production Research Agreements P-21 and P-22 by selling such information through Engineering Reports Exhibits P-26, P-44, P-45, P-46 and D-9.

4. Respondent knowingly filed or caused to be filed Two (2) U. S. Applications for Patent P-30 and P-31 pertaining to "jet bits" and "jet drilling" which was disclosed in confidence by Kinnear to Respondent in January 1940, April 1945 and later during the years 1946 and 1947 (Kinnear R. VII: 1939-51 and 1952-57).

5. Respondent knowingly and unlawfully had its Drilling Contractors who drilled Respondent's wells to use "jet bits" in the claimed inventions of the

Kinnear Patents. Exhibit P-44, Vol. 25, Number 12, Page 2, Paragraph 1, dated Dec. 1953 being an example of Respondent having their Drilling Contractors to unlawfully use the claimed inventions of the Kinnear Patents.

6. Respondent knowingly and fraudulently made secret deals with the Bit Manufacturers to manufacture and sell the "jet bit" inventions claimed in the Kinnear Patents, which has already caused and will further cause Petitioner to become engaged in many grievious and costly lawsuits to protect Petitioner's Patent property rights. (Ragland R. II, 293-95, 514-20 and 553-54); testimony of Payne Chief Engineer of Hughes Tool Co., (R. XI, 2903-14); and, Exhibits P-26, P-30, P-31, P-44, P-45, P-46 and P-47.

Respondent passed, bartered, sold, and traded in Petitioner's inventions and property rights in "jet bit" as set out above in 1-6. Respondent by "judicial admissions" in its sworn written Answers to Petitioner's Interrogatories Nos. 18(h), (i) and (j); Answers 21 - (h) and (i); and, Answers 28 - (g), states;

> "Defendant's Written Answers to Plaintiff's Written Interrogatories of July 21, 1954, Answers: No. 18 3rd unnumbered paragraph states in part, "Defendant does not contend that it invented any bit"; No. 18-(h), (i), and (j), "Defendant made no drawings of the so-called "jet-type drilling bit"; No. 21-(h) and (i), "Defendant does not contend that it invented any "jet bit"; "The drilling technique resulting from the research project resulted in the development by others of what is now commonly termed the "jet rock bit"; No. 28-(g), "Defendant does not at this time contend to be the inventor of any jet drilling bit."

From the above Sworn Answers Respondent admits that it had no property rights in "jet bits", since Respondent did not invent "jet bits", etc., therefore Respondent committed the acts 1-6 above pertaining to Petitioner's *"property rights"* in the Kinnear "jet bit" inventions and "Trade Secrets", which are acts of Unfair Competition and Unfair Trade Practices predicated of acts which lie outside the ordinary course of business and are tainted by fraud, or coercion, or conduct otherwise prohibited by law. (*Schechter v. United States* (1935), 295 U.S. 494-555 at pages 531-32; *Schreyer et al. v. Casco Products et al.*, 4th Cir. 1951, 190 F. 2d 921, at pages 924, c.d. 342 U.S. 913, 72 S. Ct. 360; *Saco-Lowell Shops et al v. Reynolds*, 4th Cir., 141 F. 2d 587-99, at page 595).

XV.

Both courts below used the wrong standards and tests and had no evidence to support their Findings of Fact, Conclusions of Law, Opinions and Judgments in deciding Petitioner's Claim of Violation of the Monopoly or Anti-trust Laws charged against Respondent, because

1. Respondent maliciously advertised to the public in its writings and Engineering Reports and Technical Articles claiming Respondent to be the ORIGINATOR, PROGENITOR AND DEVELOPER of "jet bits" and "jet drilling" as per Exhibits P-16, P-20, P-26, P-30, P-31, P-44, P-45, P-46, P-47, P-63, and D-9. (*Forgett v. Scharf*, 181 F. 2d 754, c.d. 340 U.S. 825).
2. Respondent interferred with and broke-up or attempted to break-up a $25,000,000.00 business deal (R.VII, 1695-96), between Kinnear, Weed and

Petitioner with Houston Oil Field Materials Company involving the sale and license rights of Petitioner's Patents thereby to destroy, prevent, coerce and crowd Kinnear, Weed and Petitioner out of the bit business by forcing Houston Oil Field Material Company out of said business deal, to lessen competition and restrain trade in interstate and intrastate commerce in the United States and in the State of Texas. Deposition Testimony of W. F. Weed verified by Respondent's Vice President and Director Reistle (R. IV, 878-94). Oral Testimony of Weed (R. VII, 1663-1714). Oral testimony of Reistle (R. III, 739 to R. IV, 896. Respondent's Vice-President Reistle broke-up the business deal between Kinnear, Weed, Petitioner with the Houston Oil Field Material Company, by Reistle telling Mr. O'Leary, President of Houston Oil Field Material Company that the inventions in the Kinnear Patents belonged to Respondent Humble Oil and Refining Company and Kinnear was trying to "CAPITALIZE" on informattion he got from Respondent Humble, which is verified in the record by Reistle's testimony (R. IV, 818, 825-28, 836-38, 845-46). Excerpts from testimony of Reistle (R. IV, 838):

> "A. Yes, and I told him in no uncertain terms. I told Mr. O'Leary we were not buying a Kinnear bit and we weren't going to buy Kinnear bits and I felt Mr. Kinnear was trying to *capitalize* on information he had got from the Humble Company."

3. Respondent made illegal agreements forming conspiracies and coöperated with the bit manufacturers (Ragland R. II, 293-95, 415-20, 453-54 and Exhibits P-16, P-20, P-21, P-22, P-26, P-44, P-45, P-46, P-47 and D-9).

4. Respondent made illegal Research Agreements P-21 and P-22 forming conspiracies with Standard Oil Development Company, Standard Oil Company (N.J.), its associated and affiliated companies; as follows, Creole Petroleum Corporation, one of the parties to the Production Research Agreement P-21 and P-22 states by the use of "jet bits" that,

> "However, it has been shown that improvements in drilling time represent savings of $4,500,000.-00." (Engineering Report P-44, Vol. 23, Number 1, page 7, dated January 1952.)

RAGLAND: (R. II, 457-58) states,

> Q. But there has been a considerable change over to the jet type bits, I mean?
> A. There has been in Humble's operations.
> Q. Yes, do you know whether or not any of the associates, or affiliated companies with Humble, or Standard Oil of New Jersey, whether or not they have likewise used the Humble's idea and have expanded their operations to fit drilling practices that you have just spoken about; that have been used by Humble and has been used by Humble?
> A. I am sure that some of the affiliated companies have used the techniques published in our papers; * * *."

5. Respondent made illegal agreements and conspiracies by forcing its well drilling contractors to use "jet bits" the claimed inventions of which are covered by Petitioner's Patents, to force down Respondent's costs of drilling (2/3) of Respondent's wells to "Unjustly Enrich" itself as evidenced by Engineering Report P-44, Vol. 25, Number 12, page 2, dated Dec. 1953.

Respondent's Violation of the Anti-trust Laws above quoted are acts of Respondent to lessen competition and restrain trade in interstate and intrastate commerce to prevent, destroy and crowd or drive Kinnear, Weed and Petitioner out of the bit business. It is well settled that the Anti-trust Laws are as much violated by the prevention of competition as it is by its destruction. (*United States v. Griffith*, 344 U.S. 100, at pages 107 and 108). It is also unlawful and violation of the Anti-trust laws to prevent a person from engaging in a business as it is to drive a person out of business. (*Dowd v. United Mine Workers of America et al.*, 8th Cir. 235 Fed.; *Thomasen et al. v. Union Castle Mail S. S. Co.*, 166 F. 251, 253).

XVI.

Both Courts below failed and refused to pass upon the perjury committed and unclean hands used in this case by Respondent, its witnesses, Executives, Engineers and Agents relative to material issues in this case. Perjury committed by C. E. Reistle, Jr., Vice-President of Respondent (Reistle R. III, 757, 766-70, 768, 769, R. IV, 818, 846, 872) which testimony can be found on pages 134-35, 163-64, 178-83 in BRIEF FOR PLAINTIFF-APPELLANT filed Nov. 29, 1957 in the Appellate Court below certified copies of which are filed whith the Supreme Court. Perjury committed by Douglas Ragland Chief Petroleum Engineer of Respondent (Ragland R. II, 334-36) which testimony can be found on pages 174-77 in said BRIEF FOR PLAINTIFF-APPELLANT filed Nov. 29, 1957 above mentioned. Respondent had prepared false written Answers sworn to and signed by Douglas Ragland Sept. 1, 1954 to Petitioner's Written Interrogatories dated

July 21, 1954, and particularly Answers to said Interrogatories Nos. 18 (h), (i) and (j), and, Answers to Interrogatiries Nos. 35 (b) and (c). In the sworn Answers to Interrogatories Nos. (h), (i) and (j) Respondent through Ragland knowingly made false oaths that,

> "Defendant made no drawings of the so-called 'jet-type drilling bit'."

This is perjury because Ragland had prior knowledge that Respondent and its engineers Cannon and Nolley had filed sworn U. S. Applications for Patents P-30 and P-31 containing *"complete drawings"* and description of "jet bits" and how the "jet bit" operated to perform "jet drilling", as per testimony of Douglas Ragland having "knowledge" of said applications for patent (R. II 579).

Respondents through Douglas Ragland made sworn Answers to Interrogatories Nos. 35 (b) and (c) that,

> "(b) and (c) Defendant has not made application for letters patent on any bit developed as a result of its research project number 4025 referred to in the quoted portion of the Humble Way article."

This is perjury on the part of Douglas Ragland and Respondent, because Respondent and its Engineers Cannon and Nolley did file with the knowledge of Ragland Two (2) U. S. Applications for Patent. Exhibit P-30 and P-31 (which disclose a "jet bit" with all its component parts and describes how it works), that arose out of Respondent's Research Project No. 4025 according to Respondent's documents P-16, P-20, P-26, P-44, P-45, P-46 and to Ragland's Oral Testimony at the trial (R. III, 579), which is quoted as follows:

> Q. Mr. Ragland, you testified yesterday, I believe, that you knew something about the filing of an application with the United States Patent Office by Mr. George E. Cannon and Mr. John P. Nolley, having the title of "High Speed Method of Rotary Drilling," filed March 30th, 1949, did you not?
>
> A. Yes, sir.
>
> Q. Are you familiar with the subject of that matter that was put in the patent application, generally, I mean; you knew about it?
>
> A. Yes, sir.
>
> Q. And did that subject matter relate to the different tests that were made by the Humble Oil & Refining Company on their own drilling rigs, that was included in those patent applications, that arose out of experiments in research project 4025?
>
> A. The subject matter related to a method of calculating in advance the correct or the most efficient size nozzle to use in a drilling bit.
>
> Q. It did come out of the experiments and tests of 4025, though?
>
> A. Yes, sir.
>
> Q. Research Project 4025?
>
> A. Yes, sir.

Further, Douglas Ragland and Respondent are guilty of perjury, because Ragland's Oral Testimony at the trial (R. III, 759) quoted above REPUDIATES his former FALSE SWORN written Answers Nos. 35 (b) and (c) to Petitioner's Written Interrogatories Nos. 35 (b) and (c) as set out above that

> "(b) and (c) *Defendant has not made* application for letters patent on any bit developed as a result of its

> research project number 4025 referred to in the quoted portion of the Humble Way article."

Cannon, Nolley and Respondent are guilty of perjury, because Respondent had its Engineers Cannon and Nolley to knowingly make FALSE SWORN "Oaths" and file Two (2) illegal U. S. Applications for patent P-30 and P-31 disclosing "jet bit" and "jet drilling" which Cannon, Nolley and Respondent who had prior knowledge of Kinnear's "jet bit" invention and his original and reissue U. S. Applications for patent thereon, and, Respondent's use of "jet bits" made and sold to Repondent evidenced by Bit Invoice Tickets Exhibits P-56 under the Kinnear "jet bit" applications for patent and patents thereon, which was some three (3) years or more before Cannon, Nolley and Respondent made U. S. Applications for Patents P-30 and P-31. Respondent's knowledge of the Kinnear "jet bit" inventions and applications for patent thereon is found in Ragland's oral testimony (R. II, 294-304). Nolley had prior knowledge of Kinnear's "jet bit" as per his testimony (R. V. 1103-04) and Cannon had prior knowledge of Kinnear's jet bit inventions and Respondent's use of Kinnear's jet bit as per his testimony (R. V. 1155-57), long before their applications for Patent P-30 and P-31. The Supreme Court should take "JUDICIAL NOTICE" that Kinnear's Original Patent 2,380,112 was cited as prior invention over Respondent's U. S. Application for Patent P-31 disclosing "jet bits" and "jet drilling". The citation of the Original Kinnear Patent No. 2,380,112 can be found in documentary Exhibit P-31, Paper No. 4 which is a photo copy of the Official Patent Office Action dated May 16, 1952 rejecting all claims in Respondent's Application for Patent P-31. Where a Defendant Respondent such as in the instant case filed an application for patent on the subject-matter of the invention of another, he obviously regarded such a device as patentable as was stated in the case of *Willis v. Town et al.*, 8th Cir. 1950, 182 F. 2d 892, held:

> "* * * the inference which reasonably may be drawn from the fact that the *defendant imitated the device* (Charles Pekat Mfg. Co. v. Jacobs, 7th Cir. 1949, 178 F. 2d 794, c.d. 339 U.S. 915, 70 S. Ct. 575), and that he obviously *regarded such a device as patentable* as is indicated by his application for a patent on the accused device. * * *."

All of the above oral testimony of Respondent's witnesses, sworn Answers to Petitioner's Written Interrogatories and Repondent's illegal U. S. Applications for patent shows the MOST BRAZEN RECORD OF "PERJURY" and "Unclean Hands" that has ever been presented to the Supreme Court, which was *"presented to but ignored"* by the District Court and Appellate Court below. In fact, Mr. C. W. Kinnear, President of KINNEAR-WEED CORPORATION your Petitioner complied and filed on May 18, 1959 an AFFIDAVIT with Documentary evidence before the Appellate Court below as per Clerk's certificate dated Aug. 14, 1959 (R. XVI, attached to Supplemental Transcript of the Record), setting forth perjury committed and unclean hands used in this case by Respondent, its Witnesses, Executives, Engineers and agents relating to material issues in this case and which has direct bearing upon both clearly erroneous judgments below against your Petitioner which The Supreme Court should review.

Conclusion

For the foregoing reasons, this petition for a Writ of Certiorari should be granted, and, it is respectfully requested that your petitioner may be permitted by the Court to present this case on oral argument.

Respectfully submitted,

William E. Kinnear

WILLIAM E. KINNEAR
Suite 201-B Gilbert Building
Beaumont, Texas
Counsel for Petitioner

Dated: September 28, 1959.

Proof of Service

I, WILLIAM E. KINNEAR, Counsel for Kinnear-Weed Corporation, Petitioner herein, and a member of the Bar of the Supreme Court of the United States, hereby Certify that, on the 28th day of September, 1959, I served copies of the foregoing Petition for a Writ of Certiorari to the Supreme Court of the United States on Humble Oil and Refining Company, Respondent, by mailing the required copies in a duly addressed envelope by registered air mail, return receipt requested, postage prepaid, to Mr. Walter B. Morgan, Esq., Counsel for Respondent, Post Office Box 2180, Houston, Texas.

Date: September 28, 1959.

William E. Kinnear

WILLIAM E. KINNEAR
Suite 201-B Gilbert Building
Beaumont, Texas
Counsel for Petitioner.

APPENDIX A-1

CONSTITUTION OF THE UNITED STATES

ARTICLE I, Section 8

Section 8. The Congress shall have the Power to lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for the common Defence and general Welfare of the United States; but all Duties, Imposts and Excises shall be uniform throughout the United States;

To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries;

APPENDIX A-2

MONOPOLIES AND COMBINATIONS IN RESTRAINT OF TRADE

TITLE 15 U.S.C. Sec. 1

Sec. 1. Trusts, etc., in restraint of trade illegal; exception of resale price agreements; penalty

Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal: Provided, That nothing contained in sections 1-7 of this title shall render illegal, contracts or agreements prescribing minimum prices for the resale of a commodity which bears, or the label or container of which bears, the trade mark, brand, or name of the producer or distributor of such commodity and which is in free and open competition with commodities of the same general class produced or distributed by others, when contracts or agreements of that description are lawful as applied to intrastate transactions, under any statute, law, or public policy now or hereafter in effect in any State, Territory, or the District of Columbia in which such resale is to be made, or to which the commodity is to be transported for such resale, and the making of such contracts or agreements shall not be an unfair method of competition under section 45 of this title: Provided further, That the preceding proviso shall not make lawful any contract or agreement, providing for the establishment or maintenance of minimum resale prices on any commodity herein involved, between manufacturers, or between producers, or between wholesalers, or between brokers, or between factors, or between retailers, or between persons, firms, or corporations in competition with each other. Every person who shall make any contract or engage in any combination or conspiracy declared by sections 1-7 of this title to be illegal shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by fire not exceeding $5,000, or by inprisonment not exceeding one year, or by both said punishments, in the discretion of the court. July 2, 1890, c. 647, Sec. 1, 26 Stat. 209; Aug. 17, 1937, c. 690, Title VIII, 50 Stat. 693.

TITLE 15 U.S.C. Sec. 2

Sec. 2. Monopolizing trade a misdemeanor; penalty

Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be punished by fine not exceeding $5,000, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court. July 2, 1890, c. 647, Sec. 2, Stat. 209.

TITLE 15 U.S.C. Sec. 15

Sec. 15. Suits by persons injured; amount of recovery

Any person who shall be injured in his business or property by reason of anything forbidden in the antitrust laws may sue therefor in any district court of the United States in the district in which the defendant resides or is found, or has an agent, without respect to the amount in controversy, and shall recover threefold the damages by him sustained, and the cost of suit, including a reasonable attorney's fee. Oct. 15, 1914, c. 323, Sec. 4, 38 Stat. 731.

DISTRICT COURT: JURISDICTION-COMMERCE AND ANTI-TRUST

TITLE 28 U.S.C. Sec. 1337

Sec. 1337. Commerce and anti-trust regulations

The district courts shall have original jurisdiction of any civil action or proceeding arising under any Act of Congress regulating commerce or protecting trade and commerce against restraints and monopolies. June 25, 1948, c. 646, 62 Stat. 931.

TITLE 28 U.S.C. Sec. 1338 (a), (b)

Sec. 1338. Patents, copyrights, trade-marks, and unfair competition

(a) The district courts shall have original jurisdiction of any civil action arising under any Act of Congress relating to patents, copyrights and trade-marks. Such jurisdiction shall be exclusive of the courts of the states in patent and copyright cases.

(b) The district courts shall have original jurisdiction of any civil action asserting a claim of unfair competition when joined with a substantial and related claim under the copyright, patent or trademark laws. June 25, 1948, c. 646, 62 Stat. 931.

TITLE 28 U.S.C. Sec. 1400 (b)

Sec. 1400. Patents and copyrights

(b) Any civil action for patent infringement may be brought in the judicial district where the defendant resides, or where the defendant has committed acts of infringement and has a regular and established place of business. June 25, 1948, c. 646, 62 Stat. 936.

APPENDIX A-3

REVISED CIVIL STATUTES OF THE STATE OF TEXAS (VERNON'S)

LIMITATION OF PERSONAL ACTIONS

Art. 5526. (5687-98, 3354-63, 3203-12) Actions to be commenced in two years

There shall be commenced and prosecuted within two years after the cause of action shall have accrued, and not afterward, all actions or suits in court of the following description:

1. Actions of trespass for injury done to the estate or the property of another.

2. Actions for detaining the personal property of another, and for converting such property to one's own use.

3. Actions for taking or carrying away the goods and chattels of another.

4. Actions for debt where the indebtedness is not evidenced by a contract in writing.

5. Actions upon stated or open accounts, other than such mutual and current accounts as concern the trade

of merchandise between merchant and merchant, their factors or agents. In all accounts, except those between merchant and merchant, as aforesaid, their factors and agents, the respective times or dates of the delivery of the several articles charged shall be particularly specified, and limitation shall run against each item from the date of such delivery, unless otherwise specially contracted. Acts. 1841, p. 163; G.L. vol. 2, p. 627.

6. Action for injury done to the person of another.

7. Action for injury done to the person of another where death ensued from such injury; and the cause of action shall be considered as having accrued at the death of the party injured. Acts 1897, p. 12; Acts 1841, p. 163; Acts 1852, p. 128; P. D. 4604; G.L. vol. 10, p. 1066; G.L. vol. 2, p. 627; G.L. vol. 3, p. 1006.

8. Actions of forcible entry and forcible detainer.

Art. 5529. (5690, 3358, 3207) All other actions barred, when

Every action other than for the recovery of real estate, for which no limitation is otherwise prescribed, shall be brought within four years next after the right to bring the same shall have accrued and not afterward.

APPENDIX A-4

REMEDIES FOR INFRINGEMENT OF PATENT, AND OTHER ACTIONS

TITLE 35 U.S.C. Sec. 281

Sec. 281. Remedy for infringement of patent

A patentee shall have remedy by civil action for infringement of his patent. July 19, 1952, c. 950, Sec. 1, 66 Stat. 812.

TITLE 35 U.S.C. Sec. 282

Sec. 282. Presumption of validity;

A patent shall be presumed valid. The burden of establishing invalidity of a patent shall rest on a party asserting it.

TITLE 35 U.S.C. Sec. 283

Sec. 283. Injunction

The several courts having jurisdiction of cases under this title may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable. July 19, 1952, c. 950, Sec. 1, 66 Stat. 812.

TITLE 35 U.S.C. Sec. 284

Sec. 284. Damages

Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three times the amount found or assessed.

The court may receive expert testimony as an aid to the determination of damages or of what royalty would be reasonable under the circumstances. July 19, 1952, c. 950, Sec. 1, 66 Stat. 813.

APPENDIX B-1

IN THE

United States Court of Appeals

FOR THE FIFTH CIRCUIT

No. 16780

KINNEAR-WEED CORPORATION,
Appellant,
versus
HUMBLE OIL & REFINING COMPANY,
Appellee.

Appeal from the United States District Court for the Eastern District of Texas

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(September 22, 1958)

Before RIVES, JONES and WISDOM, Circuit Judges.

RIVES, Circuit Judge: "Jet drilling" of oil and gas wells, broadly speaking, is the subject of this controversy presented by the appellant against the appellee in multiple claims listed as follows:

> "1. Infringement of Patent No. 2,380,112 and reissue patent thereof Reissue Patent No. 23,416;
>
> "2. Violation of Confidential Relationship;

"3. Unjust Enrichment;

"4. Unfair Competition and Unfair Trade Practices;

"5. Violation of Monopoly or Anti-trust laws of The State of Texas and The United States."

The complaint prays for the recovery of damages in the amount of some two hundred fifty million dollars, plus an accounting for damages suffered since the filing of the complaint which appellant in the brief states are "staggering in comparison to the paltry sum asked for up to 1953." The trial in the district court consumed some five weeks, followed by lengthy oral arguments, written briefs, and some eighteen months of consideration. The district court then entered full and lengthy findings of fact and conclusions of law,[1] along with judgment for the defendant. The record on appeal consists of more than 4200 pages and 275 exhibits and the briefs and arguments comprise some 800 pages. In addition, the plaintiff-appellant has pending in the District Court for the Southern District of Texas other actions for infringement of the patent in suit against Hughes Tool Company, Reed Roller Bit Company, and Hunt Tool Company. In short, this litigation is of a magnitude befitting the State of Texas. Except, however, for such tremendous volume, the legal principles appear not too difficult.

"Jet drilling" has come into vogue since 1948. Under a number of drilling conditions, it has proved many times faster and more efficient than ordinary rotary drilling.

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[1] Reported as Kinnear-Weed Corp. v. Humble Oil & Refining Co., 1956, 150 F.Supp. 143-162.

The terms rotary drilling and jet drilling were well described by the district court as follows:

> "In rotary drilling, a bit is attached to the lower end of a string of pipe known as the 'drill stem' which is rotated by machinery located at the surface. The cutting elements on the bit cut or crush the formation into small chips. Mud laden water known as drilling fluid is pumped down through the drill stem and out through water courses in the bit onto the cutters, the formation being drilled, or both. The drilling fluid cools and lubricates the bit and also removes the chips produced by the bit, carrying them upwardly through the annular space between the drill stem and the wall of the hole, to the surface.
>
> * * * *
>
> "The term 'jet drilling' as used in the industry means a technique which consists of utilizing the available horsepower on a given drilling rig in the most efficient manner by correlating properly all of the various factors affecting the rate of penetration including (1) rate of fluid circulating through the bit, (2) fluid velocity through the bit nozzles, (3) speed of rotation of the bit, (4) amount of weight maintained on the bit; and (5) annular rising velocity."

Kinnear-Weed Corp. v. Humble Oil & Refining Co., 1956, 150 F. Supp. 143, 147, 148, 150.

In accordance with a familiar law of physics,[2] the district court found that "it was discovered that the rate of penetration was greatest when the *product* of nozzle fluid velocity and rate of circulation (frequently referred to as 'QV') was at a maximum, rather than when either of these factors alone was at a maximum." 150 F.Supp. at p. 151.

Appellant's patent in suit, according to its opening paragraph, "relates to new and useful improvements in a rotary drilling bit." Appellant now claims that its patent covered the original "jet bit" which made possible the development of "jet drilling." A true "jet bit" is thus described by the district court:

> "The term 'jet bit' as used in the industry means a bit having the following characteristics:
>
> "(1) water courses properly sized to give the maximum product of nozzle fluid velocity and rate of circulation for a given hydraulic system,
>
> "(2) water courses lined with erosion resistant material so that they will retain their most efficient diameter throughout the useful life of the bit, and
>
> "(3) water courses so positioned that the high velocity fluid issuing therefrom will not destroy or damage the cutting elements of the bit through erosion, which mea , as a practical matter, that the streams of drilling fluid issuing from the water courses should not strike the cutting elements of the bit."

150 F.Supp. at p. 150.

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[2] Under "momentum", Webster's Dictionary tells us [illegible]ear momentum' is momentum of translation and equals [illegible] product of the mass and the velocity of the center of [illegible] mass."

Appellant argues and insists on some forty-two "Points on Appeal," in the course of which it attacks all or nearly all of the ninety separate findings of fact by the district court and its twelve conclusions of law. Actually, at the conclusion of the trial, each party had, at the request of the court, submitted proposed findings of fact and conclusions of law, and the district court finally adopted those submitted by the defendant. That practice is not unusual and is entirely proper. Further, Rule 52 (a), Federal Rules of Civil Procedure, has application to the effect of such findings as those of the court. Nevertheless, we must say that findings and conclusions which represent the independent judicial labors and study of the district judge are more helpful to this Court. We do not find it necessary to review each of the numerous findings and conclusions, but pass directly to a few simple propositions which we find determinative of the result of this appeal.

The original application for appellant's patent was filed by C. W. Kinnear on January 2, 1942. A number of his claims were rejected by the Patent Office. The patent issued on July 10, 1945, covered only two claims, each restricted to a particular form of roller cutter for drill bits. On January 7, 1946, Kinnear applied for a reissue of his patent on the ground that, as the result of inadvertence, accident, or mistake, the original patent did not fully set forth and claim his true invention. The Patent Office then discovered that the two claims of the original patent had been anticipated by a patent to Decker, No.

1,152,151, which had previously been overlooked, and those claims were rejected. The reasserted claims to the entire bit per se were also rejected upon two grounds: (1) lack of invention; and (2) estoppel because of the abandonment of such claims during the prosecution of the original patent. The Board of Patent Appeals ruled contrary to the primary examiner on the question of invention, but affirmed his ruling on estoppel. In an action under Revised Statutes 4915 and 4916, now embodied in 35 U.S.C.A. 145, 146, 251, and 252, the United States District Court for the District of Columbia held that the applicant was not estopped to reassert his claims 5 through 14 in the application. *Kinnear v. Marzell, Commissioner*, D.C. Dist. Col. 1951, 95 F.Supp. 55.

The Patent Office then allowed those ten claims, renumbered as Claims 3 through 12, inclusive, along with eight other claims, 13 through 20, inclusive, which the applicant represented as "based on" the subject matter of the other ten claims. Reissue patent No. 23,416 was thus granted on October 16, 1951, nearly ten years after January 2, 1942, the date of the application for the original patent.

During that ten-year interval, the technique of jet drilling had been fully developed by the appellee, and explained in the publication of a series of technical papers and in two nontechnical articles. Appellant contends, however, that appellee's successful development and use of "jet drilling" came about as the result of breach of confidence and unfair competition.

Shortly prior to issue of his original patent, Kinnear had called on the leading bit manufacturers, Hughes Tool Company, Reed Roller Bit Company, and Hunt Tool Company, in unsuccessful efforts to interest them in the manufacture of his bit. He then called on Douglas Ragland, appellee's chief petroleum engineer, and showed him his patent application, notice of allowance, machine shop drawings, and explained the operation of his bit using a wooden model which has been introduced in evidence. We agree with the findings of fact by the district court that Kinnear did not furnish any confidential information to Ragland, or any information which he had not theretofore furnished to the bit manufacturers, or which could not be readily ascertained from the patent application and from the bits themselves.

The appellee company was not engaged in the manufacture of bits, but Ragland, on its behalf, did consent to test appellant's bit in its well drilling operations. Accordingly, appellee purchased in 1945 and 1946 about fifty-two of appellant's bits, and actually used about twenty-two of them in tests.

Appellant's contention that Kinnear invented "jet drilling" extends to the invention of a process, method, or technique, going far beyond the scope of his claims which are limited to "improvements in a rotary drill." We are, however, brought to the inquiry of whether Kinnear invented the original "jet bit" which made possible the development of "jet drilling." In that inquiry, we look primarily to the disclosures in the original application for patent filed on January 2, 1942, and the history of the prosecution of that application. From such sources and from all of the evidence, we are convinced that Kinnear, like many others in the industry,[3] had recognized the importance of having the drilling fluid strike directly on the bottom of the hole, but that he did not disclose the necessity of having the water courses lined with erosion-resistant material, nor of having *all* of the water courses so positioned that the abrasive drilling mud under high pressure would not destroy or damage the cutting elements of the bit. In fact, the drawings made a part of the application disclose two ducts leading directly to the tops of the two roller cutters, and the specifications provide:

> "The smaller fluid course ducts directly blast the cutting teeth on the outer bottom roller cutters as the said teeth on the cutters rotate past the port holes of said smaller fluid course ducts during drilling operation."

Appellant emphasizes that none of the claims of the patent include these two smaller ducts. That is true, but neither do any of the claims exclude them. They are completely inconsistent with the successful operation of a "jet bit." It is elementary that claims are construed in the light of the description and to cover the real invention found in the specification and drawings.[4] So construed, these two smaller ducts are a part of the combination in which appellant's drill was expected to be used. We agree with the district court that the appellant has not infringed appellee's patent. Further, we agree with the disposition by the district court of the claims other than for patent infringement.

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[3] See the patents and publications listed in the district court's finding 76, 150 F.Supp. 157.

[4] See the many cases collected in 2 Walker on Patents, Sec. 261, pages 1212-1218, and in 69 C.J.S. **Patents,** Sec. [illegible]

The district court went further, and, in line with the admonition of the Supreme Court,[5] passed on the validity of the patent, and held it invalid. That finding is not essential to the disposition of the issues in this case. The issues are so far flung and broadly drawn that we have not satisfied ourselves as to the validity of the claims limited to the form of combination bit shown in the patent. For purposes of this case, it is enough to hold, as we do, that the claims must be so limited to a combination bit constructed substantially in accordance with the drawings and the descriptive language in the patent specification. The judgment of the district court is therefore

AFFIRMED.

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[5] Sinclair & Carroll Co., Inc. v. Interchemical Corp., 1945, 325 U.S. 327, 330.

APPENDIX B-2

IN THE

United States Court of Appeals

FOR THE FIFTH CIRCUIT

No. 16780

KINNEAR-WEED CORPORATION,
Appellant,
versus
HUMBLE OIL & REFINING COMPANY,
Appellee.

Appeal from the United States District Court for the Eastern District of Texas

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(April 30, 1959)

ON PETITION FOR REHEARING

Before RIVES, JONES and WISDOM, Circuit Judges.

PER CURIAM: We did not intend to read into the claims of appellant's patent, as limitations of that patent, any part of the drawings or of the specifications not expressed or necessarily referred to by implication in those claims. In our opinion, the claims themselves of the reissue patent are limited to a combination rotary drilling tool, bit, or drill, and the patent has not been infringed by the appellee. We correct clerical errors in a sentence in the next to the concluding paragraph of the opinion reading, "We agree with the district court that the appellant has not infringed appellee's patent" by changing the sentence to read "We agree with the district court that the appellee has not infringed appellant's patent." The petition for rehearing is

DENIED.

APPENDIX B-3

In The
UNITED STATES COURT OF APPEALS
For The Fifth Circuit

NO. 16780

KINNEAR-WEED CORPORATION, *Appellant*,
versus
HUMBLE OIL & REFINING COMPANY, *Appellee*

Appeal from the United States District Court for the Eastern District of Texas

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(JULY 2, 1959)

ON SECOND PETITION FOR REHEARING

Before RIVES, JONES and WISDOM, Circuit Judges.

Per Curiam:

The second petition for rehearing presented in this cause on the 21st day of May, 1959, is received and permitted to be filed, but, upon consideration, the said second petition for rehearing is

DENIED.

(ORIGINAL FILED: July 2, 1959)

APPENDIX B-4

KINNEAR-WEED CORPORATION,
Plaintiff,
v.
HUMBLE OIL & REFINING COMPANY, Defendant.

Civ. A. 2363.

United States District Court
E. D. Texas, Beaumont Division.

Sept. 28, 1956.

*150 F. Supp. 143

CECIL, District Judge.

1. Plaintiff, Kinnear-Weed Corporation, is a Texas corporation having its principal office and place of business in Beaumont, Texas. Plaintiff is the owner of U.S. Patents Nos. 2,380,112 Re. 23,416, both issued to C. W. Kinnear, the subject matter of which is a rotary drill bit for drilling oil and gas wells. These patents constitute plaintiff's principal assets and plaintiff's only business is the exploitation of these patents.

2. Defendant, Humble Oil & Refining Company, is a Texas corporation having its principal office and place of business in Houston, Texas; Defendant is engaged in the business of producing, refining and marketing petroleum and petroleum products. Defendant is not in the drill bit business, but does use drill bits in the drilling of its oil and gas wells. Defendant has an office and does business in the Eastern District of Texas.

3. Plaintiff charges defendant with breach of a confidential relationship, unfair competition, patent infringement and violation of the Federal and Texas anti-trust laws. All of these claims involved, and are inextricably connected with, the above-mentioned two Kinnear patents, Nos. 2,380,112 and Re. 23,416.

4. In addition to this suit, plaintiff has sued Hughes Tool Company, Reed Roller Bit Company and Hunt Tool Company, all of Houston, Texas, for infringement of the same two patents, as well as for violation of confidential relationship and unfair competition. These suits are pending in the United States District Court for the Southern District of Texas, Houston Division.

5. In rotary drilling, a bit is attached to the lower end of a string of pipe known as the "drill stem" which is rotated by machinery located at the surface. The cutting elements on the bit cut or crush the formation into small chips. Mud laden water known as drilling fluid is pumped down through the drill stem and out through water courses in the bit onto the cutters, the formation being drilled, or both. The drilling fluid cools and lubricates the bit and also removes the chips produced by the bit, carrying them upwardly through the annular space between the drill stem and the wall of the hole, to the surface.

6. Rotary drill bits fall into the following generally recognized categories, depending upon the cutting elements on the bit:

(a) Drag bits
(b) Cone bits
(c) Cross-roller bits
(d) Combination bits

7. Drag bits have one or more blades with sharp, chisel-like cutting edges as their only cutting elements. They are normally used for drilling in relatively soft formations, such as sand and shale, and accomplish drilling by means of the dragging or scraping action of the cutting edges on the formation. Drag bits having two blades are commonly known as "fish-tail" bits by reason of their shape. Drag bits have been used in the Gulf Coast since approximately 1900.

8. Cone bits normally have either two or three cone-shaped cutters, which are usually equipped with a plurality of sharp teeth. The cones are mounted on axles or spindles, and as the bit rotates, the cones roll over the bottom and accomplish drilling by means of the crushing or chipping action of the teeth on the formation. These bits have no blades of any kind and the cones cut the entire bottom of the hole. Cone bits have been used in the Gulf Coast since approximately 1910. Originally intended for drilling hard formations only, such as rock, bits of this type have gradually been modified and improved with the result that cone bits are now capable of drilling through practically all formations, hard and soft, and have to a great extent replaced drag bits, which now account for a very small percentage of the total bits used. The cone bit was pioneered and developed primarily by Howard R. Hughes, Sr. and the Hughes Tool Company, which is the largest manufacturer of drilling bits in the world.

9. Cross-roller bits have two independent sets of rolling cutter elements equipped with cutting teeth. The first set consists of a pair of outer-roller cutters, which cut the outer bottom portion of the hole; the other set consists of two or more roller cutters mounted on an axle

or axles disposed between the outer roller cutters at substantially right angles to the axles of the outer-roller cutters. Cross-roller bits have no blades and the entire bottom of the hole is cut by the rolling cutters. Like cone bits, cross-roller bits were originally intended for drilling hard formations, such as rock, and accomplish drilling by the crushing or chipping action of the teeth on the formation being drilled. They have been used in the Gulf Coast area almost as long as cone bits.

10. Combination bits have both roller cutters and one or more blade-type cutters. Generally, the roller cutters are mounted on the inner sides of a pair of downwardly extending legs, and the blade is positioned between the roller cutters. Combination bits are intended to be used in alternating hard and soft formations. In actual practice, however, their use is largely confined to drilling the surface hole, i.e., the first thousand or so feet of the well. Relatively few combination bits are used in comparison with the other types, particularly cone and cross-roller bits.

11. Plaintiff contends that C. W. Kinnear conceived the idea of positioning the water courses in the bit body so that the streams of drilling fluid discharged therefrom would miss the cutting elements and strike directly on the bottom of the hole in what plaintiff refers to as "a concentrated stream" or a "direct blast". Plaintiff further contends that this concept is disclosed and claimed in the two patents in suit, was disclosed by C. W. Kinnear to defendant in confidence prior to the issuance of either of the patents in suit, was utilized by defendant to its own advantage in the drilling of its wells, was disclosed by defendant to others in violation of such confidence, was wrongfully appropriated and publicized by defendant

as defendant's own development and was monopolized or attempted to be monopolized, and was used by defendant to restrain trade, in violation of the anti-trust laws.

12. Defendant denies that C. W. Kinnear invented the concept of positioning the water courses in a bit so that the drilling fluid would miss the cutters and strike directly on the bottom of the hole, denies that the patents in suit disclose or claim any such concept, denies that C. W. Kinnear disclosed such concept (or any other information) to defendant in confidence, denies that defendant utilized, disclosed to others or published any information obtained by it from C. W. Kinnear, denies that it has competed unfairly with C. W. Kinnear, or his successors in interest, including plaintiff, denies that the patents in suit are valid or have been infringed by defendant, denies that defendant has violated any of the anti-trust laws and denies that Kinnear, or his successors in interest, including plaintiff have been injured by any act of defendant.

13. On January 2, 1942, C. W. Kinnear filed an application in the U. S. Patent Office entitled "Drill", disclosing a combination bit having a pair of disk-shaped outer-roller cutters mounted on the opposite side faces of a fish-tail blade, with two pairs of water courses through the bit body, one pair positioned to discharge drilling fluid directly onto the tops of the outer-roller cutters and the other pair positioned to discharge drilling fluid onto and wash down the opposite side faces of the fish-tail blade and thence onto the bottom of the hole. The applicant asserted claims to the entire combination bit and to the structure of the outer-roller cutter per se. The Patent Office rejected the claims to the entire combination bit, but allowed two claims covering the roller cutter per se.

and U. S. Patent No. 2,380,112 was issued to C. W. Kinnear on July 10, 1945 containing these two claims.

14. On June 7, 1946, Kinnear applied for a reissue of a patent on the ground that, as the result of inadvertence, accident or mistake, the original patent did not fully set forth and claim his true invention. During the prosecution of the reissue application, the two claims of the original patent covering the roller cutter per se were rejected by the Patent Office and were abandoned by the applicant, but eventually the patent was reissued on October 16, 1951, as Re. 23,416, with 18 claims (Nos. 3-20). The two claims of original Patent No. 2,380,112 form no part of Re. 23,416.

15. In the Spring of 1945, after receiving notice from the Patent Office that the two claims covering the roller cutter per se had been allowed on his original application, Kinnear called on Douglas Ragland, an employee of defendant. Kinnear explained his bit to Ragland and told Ragland the status of his patent application. This was the first contact between Kinnear and defendant concerning or relating to the subject matter of this suit. The purpose of Kinnear's visit was to induce defendant either to finance the manufacture of Kinnear's bit or to purchase and test some of his bits. Ragland explained to Kinnear that, as a matter of policy, defendant was not interested in financing manufacture of the bit, but that defendant would be willing to test the bit. Thereafter in 1945 and 1946, defendant purchased approximately 52 bits from Kinnear. These bits were made in accordance with Patent No. 2,380,112, substantially as shown by the wooden model. Plaintiff's Exhibit No. 9. Defendant used approximately 22 of these bits in tests and junked the remaining 30.

after concluding that the Kinnear bit was less satisfactory than competitive bits.

16. At no time did defendant request Kinnear to furnish any information to defendant. All information given by Kinnear to defendant was volunteered by Kinnear in his efforts to interest defendant in financing the manufacture of, or in purchasing, his bits. Kinnear did not ask defendant to keep any information confidential and defendant did not promise or agree to keep confidential any information received by it from Kinnear.

17. The information disclosed by Kinnear to defendant consisted of the contents of Kinnear's original patent application (including the notice of allowance of the two claims on the roller cutter per se), some machine shop drawings showing the actual dimensions of his bit and his wooden model. Plaintiff's Exhibit No. 9. At no time did Kinnear furnish to defendant any information concerning his invention which was not contained in the patent application or shown by the drawings and/or the wooden model.

18. The drawings and the wooden model which Kinnear showed defendant simply illustrated the bit disclosed in his application. Accordingly, Patent No. 2,380,112 discloses everything of substance which Kinnear told any employee of defendant with reference to his invention.

19. Prior to his first contact with defendant in the Spring of 1945, Kinnear had discussed his bit with the leading bit manufacturers in the Houston area, including Hughes Tool Company, Reed Roller Bit Company and Hunt Tool Company, and had disclosed to each of these substantially the same information he later disclosed to defendant, including his patent application, drawings of his bit and his model.

20. All of defendant's acts of which plaintiff complains, including the alleged publication and disclosure to others of information received from Kinnear, and use of "jet" bits and "jet" drilling, occurred after the issuance of Patent No. 2,380,112.

21. Kinnear sold a few of his bits to other oil operators in addition to the bits he sold to defendant in 1945 and 1946. Each of these bits disclosed to the public the way in which it was constructed. Any competent mechanic could have duplicated the Kinnear bit after examining one of the bits which Kinnear sold and any competent driller on seeing such a bit would have known how to use it for drilling wells.

22. The term "jet drilling" as used in the industry means a technique which consists of utilizing the available horsepower on a given drilling rig in the most efficient manner by correlating properly all of the various factors affecting the rate of penetration, including (1) rate of fluid circulating through the bit, (2) fluid velocity through the bit nozzles, (3) speed of rotation of the bit, (4) amount of weight maintained on the bit, and (5) annular rising velocity.

23. The term "jet bit" as used in the industry means a bit having the following characteristics:

(1) water courses properly sized to give the maximum product of nozzle fluid velocity and rate of circulation for a given hydraulic system.

(2) water courses lined with erosion resistant material so that they will retain their most efficient diameter throughout the useful life of the bit, and

(3) water courses so positioned that the high velocity fluid issuing therefrom will not destroy or damage the cutting elements of the bit through erosion, which means, as a practical matter, that the streams of drilling fluid issuing from the water courses should not strike the cutting elements of the bit.

24. Kinnear did not furnish defendant any information concerning "jet drilling" or "jet bits".

25. Neither of the patents in suit contains a disclosure of "jet drilling" or "jet bits".

26. The technique of "jet drilling" was developed by defendant as the result of a research program into the hydraulic factors affecting the rate of penetration in rotary drilling, which was commenced in 1943, was formalized as Research Project 4025 on January 1, 1946 and was intensified as equipment and personnel became available in the years immediately following the War. This program involved primarily a series of "short interval" tests conducted on a number of defendant's drilling rigs under actual field conditions, wherein all but one of the various factors known to affect the rate of penetration would be held constant while the remaining factor would be varied from minimum to maximum within practical limits and the results recorded. The data obtained from these tests enabled defendant's engineers to determine the relative importance of the several factors involved, and to correlate these factors in order to achieve optimum efficiency in drilling. For example, it was discovered that the rate of peneration was greatest when the *product* of nozzle fluid velocity and rate of circulation (frequently referred to as "QV") was at a maximum, rather than when either

of these factors alone was at a maximum. These data also enabled defendant's engineers to predetermine the most efficient set of drilling conditions for any given drilling operation, including, in particular, selecting the diameter of the nozzle in the bit which would produce the maximum QV.

27. Defendant's engineers also discovered, as a result of this research project, that when the bit was equipped with nozzles of the proper diameter to produce a jet stream having the maximum QV, the velocity of the jet stream was so great that (a) the nozzles had to be lined with an extremely hard, erosion resistant material or they would become enlarged very quickly and would no longer be the proper size, and (b) the cutting elements of the bit had to be protected from the abrasive effects of the high velocity jet streams, either by hard surfacing or, preferably, by directing the streams so as to miss the cutting elements and hit the bottom of the hole. Both the lining of nozzles with erosion resistant material and the positioning of the nozzles so as to discharge drilling fluid directly onto the bottom of the hole, missing the cutters, were old long before the inception of defendant's research program. For example, in 1938 the defendant used a large number of so-called "parabolic blade" bits having water courses so positioned as to discharge streams of drilling fluid directly on the bottom of the hole ahead of the blade. Hard metal nozzles were used to protect bit water courses from fluid erosion at least this early.

28. Defendant's initial experiments were with drag bits and defendant obtained from various bit manufacturers drag bits equipped with tungsten carbide nozzles of vary-

ing diameters for use under different drilling conditions, the nozzles being positioned so as to direct the high velocity jet streams onto the bottom of the hole, ahead of the blade, rather than onto the blade. These bits obtained and used by defendant commencing in 1946, were the first of the so-called "jet" bits.

29. Defendant's drilling crews, using "jet" drag bits and applying the technique of "jet" drilling, achieved significant increases in rate of penetration and over-all drilling efficiency in a number of instances.

30. Commencing in 1948, defendant's engineers published a series of technical papers containing the results of defendant's research program and explaining the principles of "jet" drilling with "jet" drag bits.

31. In 1948 defendant requested several of the leading bit manufacturers, particularly Hughes Tool Company and Reed Roller Bit Company, to furnish defendant with rock bits suitable for use in "jet" drilling. The conventional rock bit in general use at that time had relatively larger water courses than those used in "jet" drag bits with which defendant had previously experimented. Moreover, the water courses in conventional rock bits in most instances were not lined with abrasion resistant material and they discharged in whole or in part upon the cutting elements. In order to convert their conventional rock bits to "jet" bits, the bit manufacturers relocated the nozzles so that the jet streams would not strike the cutters, equipped the nozzles with erosion resisant material and, generally, reduced the total nozzle area. None of these changes presented any difficult or unusual problems to the bit manufacturers since bits had been made for many

years which incorporated water courses positioned to discharge drilling fluid onto the bottom of the hole missing the cutters and nozzles made of erosion resistant material. Moreover, bits had been made for many years with water courses as small as those found desirable for "jet" drilling. The first "jet" rock bits were furnished to defendant by the bit manufacturers during the latter part of 1948 and early 1949. Defendant's tests indicated that these "jet" rock bits, when used in accordance with the "jet" drilling technique, would drill faster than conventional rock bits under many drilling conditions.

32. As the result of defendant's successful use of the experimental "jet" rock bits, the bit manufacturers went into large scale commercial production of "jet" rock bits. Hughes Tool Company's first production line jet rock bit was the so-called "Iron Pants", which came on the market early in 1950. Reed Roller Bit Company followed suit with its "Liquid Blast" cross-roller jet bit about the same time. These were followed by Hughes "Integral Jet" rock bit and by Reed's "Twin Blast" rock bit in 1952.

33. Approximately 30 per cent of the rock bits now being manufactured are of the "jet" type. The large percentage of conventional rock bits still being manufactured is due to a number of factors including the additional cost of "jet" bits, the increased over-all cost of "jet" drilling and the failure of "jet" bits to outperform conventional bits under many drilling conditions.

34. In addition to the technical papers published by defendant's engineers, defendant published two articles in its house organ, "The Humble Way", one in 1950 and another in 1952, summarizing in non-technical language

the results of defendant's work with "jet" bits and "jet" drilling. This magazine is distributed by defendant throughout all 48 states to its stockholders and to others interested in the oil business.

35. Defendant summarized the results of its research work, including its development of "jet" drilling, in periodic reports submitted to its affiliate, Stanadrd Oil Development Company, pursuant to a contract between these two corporations providing for the sharing of the benefits and the expenses of research conducted by each. This information was in turn transmitted by Standard Oil Development Company to other members of the Standard group with which it had similar arrangements.

36. No information disclosed by Kinnear to defendant was used by defendant in developing or practicing "jet" drilling in using "jet" bits, in obtaining "jet" bits, from bit manufacturers, nor was any such information included in defendant's reports to its affiliates, in the technical articles on "jet" drilling, or in the two Humble Way articles on "jet" drilling.

37. None of the information furnished by Kinnear to defendant in connection with Kinnear's alleged invention and/or the bit which he sold to defendant and which defendant tested and then discarded, was used by defendant for any purpose other than the testing and evaluation of the Kinnear bit. Defendant made no unauthorized disclosures of this information to others and made no agreements with bit manufacturers which pertained to Kinnear's alleged invention and/or bit or to anything which Kinnear disclosed to defendant.

38. Defendant has not manufactured any bits, and has not "palmed off" as its own or as those of bit manufacturers any bits incorporating any invention or idea of Kinnear or of plaintiff.

39. Defendant has committed no fraudulent or unfair trade practice in connection with jet drilling or jet bits, or in connection with any invention of Kinnear, or in connection with anything disclosed by Kinnear to defendant.

40. Plaintiff has never made or sold a bit. The business which Plaintiff claims was interrupted or damaged by defendant was new and unestablished. Kinnear never manufactured or sold bits on a commercial basis, and he lost money on the bits he did manufacture and sell.

41. Plaintiff has suffered no injury or damage as a result of any act of defendant alleged in Paragraphs 10, 11 and 12 of the Complaint.

42. The publication by defendant of articles on "jet" drilling, complained of by plaintiff, occurred more than two years before the filing of this suit and such publication was known to plaintiff or its predecessors at or shortly after the time it occurred.

43. Defendant did not enter into any of the unlawful agreements, combinations or conspiracies alleged in Paragraph 12 of the Complaint.

44. Defendant did not monopolize or attempt to monopolize trade or commerce, as alleged in Paragraph 12 of the Complaint.

45. Defendant did not interfere with the consummation of a business deal between plaintiff or its predecessors

and Houston Oil Field Material Company, as alleged in Paragraph 12 of the Complaint.

46. Defendant did not interfere with the sale of bits by plaintiff and/or plaintiff's predecessors, as alleged in Paragraph 12 of the Complaint.

47. Defendant has committed no act prohibited by the Federal or Texas anti-trust laws nor has defendant injured the public by any of the acts alleged in Paragraph 12 of the Complaint.

48. In its claim of patent infringement, plaintiff charges that defendant has infringed both Patent No. 2,380,112 and Re. No. 23,416 by using drill bits having water courses so positioned that the streams of drilling fluid issuing therefrom strike directly upon the bottom of the hole without first striking the cutting elements of the bit. Plaintiff has specified 19 different bits, each of which it contends infringes its patents. These bits are made by 8 different bit manufacturers. All of the accused bits are "jet" bits. Some of them are drag bits, some are cone bits, some are cross-roller bits, and some are combination bits.

49. Defendant contends that it has not infringed either of plaintiff's patents by its use of any of the accused bits or by any other act. Defendant further contends that Patent No. 2,380,112 was extinguished by the grant of Reissue No. 23,416, and that Reissue No. 23,416 is invalid because of anticipation and lack of invention over the prior art.

50. The specification and drawings of Re. 23,416 are the same as the specification and drawings of Patent No. 2,380,112, except that the reissue contains one additional "object" of the alleged invention in column 2, lines 28

through 39. The claims of Re. 23,416, of course, are different from those of Patent No. 2,380,112. Plaintiff contends that claims 3 through 19 of the reissue are infringed by defendant's use of the accused combination bits, that claims 13 through 16 are infringed by defendant's use of the accused cone and cross-roller bits, and that some or all of the claims are infringed, through application of the "doctrine of equivalents", by defendant's use of the accused drag bits. Plaintiff concedes that none of the claims covers the method of "jet" drilling or any other method.

51. The disclosure of both patents is confined to a specific type of combination bit, which has a pair of disk-shaped outer-roller cutters mounted on spindles extending outwardly from the opposite side faces of a fish-tail blade. Several embodiments of this bit are shown. The principal embodiment has a plain fish-tail blade. In the other embodiment the fish-tail has slots in its cutting edge in which small, individual roller cutters are mounted. Two of the four water courses through the bit body are positioned to discharge drilling fluid on top of the two outer-roller cutters. The other two wtaer courses are positioned to discharge drilling fluid onto and wash down the front faces of the cutting blades and thence onto the bottom of the hole. The apparent purpose of the applicant was to provide a bit capable of drilling through alternating hard and soft formations, which is the intended purpose of all combination bits.

52. Neither of the patents contains any disclosure of any bit other than a particular type of combination bit. There is no mention in either of the patents of drag bits, cone bits or cross-roller bits. There is no indication in either of the patents that the subject matter of the alleged

invention was the positioning of the water courses. There is no suggestion in either patent that any of the water courses should be so positioned that the drilling fluid issuing therefrom would be discharged so as to miss the cutters and strike directly onto the bottom of the hole. On the contrary, the drilling fluid discharged from each of the water courses of the bit disclosed in the patents would hit the cutting elements.

53. Neither patent discloses or mentions the use of abrasion resistant material in the water courses or nozzles. Neither patent even suggests the existence of an erosion problem. Long prior to the date of Kinnear's alleged invention, the use of abrasion resistant material in the water courses or nozzles or drill bits was well known, as shown by the publication "Fusion Facts", October, 1938, pp. 194-196 (Defendant's Exhibit 148).

54. Neither of the patents discloses the drilling conditions under which the tool shown therein is to be used. Specicifically, there is no disclosure of the pump pressure, circulating rate, nozzle velocity, rotating speed, weight on the bit or annular rising velocity, these being among the factors which were known long prior to the date of Kinnear's alleged invention to affect the rate of penetration and which defendant correlated in developing its "jet" drilling technique. The only reference to pressure in the patents is in the expression:

> "It being remembered that flushing fluid under high pressure will dislodge and cut a great amount of the cuttings from the bottom of the well hole."

Prior to Kinnear the industry had used pump pressure as high as 2500 pounds per square inch, which is in excess of the pressures generally used today even in practicing jet drilling.

55. Neither of the patents discloses the size of any of the water courses other than to refer to the lower pair (discharging down the front faces of the blades) as "large fluid course ducts" and the upper pair (discharging onto the outer-roller cutters) as "smaller fluid course ducts". However, no dimensions are given. Moreover, there is no disclosure in either of the patents of the existence of an optimum nozzle size to achieve the maximum QV under a given set of drilling conditions, nor that the nozzle size should be changed so as to maintain the maximum QV as the other drilling conditions change during the drilling of a well.

56. The word "blast" which is used in the patents in suit to describe the action of the drilling fluid on the bottom of the hole has no particular significance in this art and is not defined in the patents. If the term is to be given any meaning at all, it must mean the same thing as the term "jet", which has been used to describe the action of drilling fluid on the bottom of the hole since the inception of rotary drilling.

57. The Patent Office file histories of both patents clearly show that at least up until the summer of 1951 (by which time "jet" bits had gained considerable popularity and were being widely used in the drilling industry) Kinnear regarded himself as the inventor of nothing more than the particular form of combination bit acually disclosed in his patents. The oath executed by the applicant on June 3, 1946 and filed with his application for reissue states that the invention for which the reissue patent was sought consists of "the combination of a fish-tail type

drill for removing soft formation from the bottom of a bore hole and a roller type drill for removing hard formation". In that oath the applicant further described his invention as a drill bit having "a body * * * whose lower portion is reduced in thickness forming a shank, and terminating at its lower end in a blade, or blades, having forwardly directed cutting edges adapted to operate against the bottom of the bore * * * with spindles anchored to the opposite sides of the shank whereon roller cutters are mounted and positioned to operate against the outer bottom portions of the bore".

58. With respect to the positioning of the water courses in his bit, Kinnear represented to the Patent Office that he considered the positioning of the lower pair of water courses so that the drilling fluid discharged therefrom would wash down the front faces of his fish-tail blade, as a part of his alleged invention. In this connection, Kinnear distinguished his invention over that shown in the Waxler Patent No. 2,198,849, which had been cited by the Patent Office, by arguing that Waxler's water courses were so positioned that the flushing fluid issuing therefrom would "blast" out some distance in front of the drag blades and that it would be "impossible" for the drilling fluid in Waxler's bit to wash down the front faces of his drag blades. Kinnear used the same argument to distinguish his invention over the Scott patent No. 1,850,358. During the course of the prosecution of the original patent, Kinnear amended many of his claims to recite that the lower water courses were so positioned that fluid issuing therefrom would discharge "directly onto and wash down" the front faces of the blades.

59. Kinnear also represented to the Patent Office, for the purpose of distinguishing his alleged invention from the

prior combination bits cited by the Examiner, that none of the latter showed the mounting of the outer-roller cutters on spindles attached to the opposite side faces of the blade as in his construction, but instead showed the outer-roller cutters mounted on a pair of downwardly and outwardly extending legs.

60. Claims 3 through 12 of Re. No. 23,416 appeared in the reissue application as claims 5 through 14. These claims were rejected by the Patent Office on the ground of estoppel and also on the ground that the claims lacked invention over the prior art. From the Examiner's rejection of claims 5 through 14, Kinnear appealed to the Patent Office Board of Appeals. The Board of Appeals disagreed with the Examiner on the question of patentability, stating:

> "We have compared claims 5 to 14, inclusive, with the prior art cited by the Primary Examiner, and we do not find in the latter the specific relation of the elements recited in these claims, which require that the spindles be mounted on the opposite side faces of the reduced portion of the body. For the reason that we do not agree with the position of the Primary Examiner to the effect that reducing the shank of the bit does not affect the operation of the bit in connection with the specific arrangement of fish-tail and rolling cutters, we are not of the opinion that patentability of these claims is denied by this prior art."

However, the Board of Appeals affirmed the rejection of the claims on the ground of estoppel.

61. On April 15, 1949, Kinnear appealed from the decision of the Board of Appeals to the United States District Court for the District of Columbia, under R S

§ 4915, 35 U.S.C.A. §§ 145, 146. This proceeding terminated in a judgment dated February 9, 1951, Kinnear v. Marzall, D.C., 95 F. Supp. 55, holding that the applicant was not estopped to make claims 5 through 14, that the Patent Office had erred in rejecting those claims on the ground of estoppel and ordering the Patent Office to issue Kinnear a patent for those claims. The court confined its decision to the question of estoppel and did not pass on the question of patentability, expressly stating that the patenability question was not before it.

62. In compliance with the judgment of the District Court, prosecution was resumed before the Patent Office. In an amendment dated June 26, 1951, the applicant sought to add claims 21 through 34, some of which read directly upon the Hughes' tri-cone-jet bits and others on the Reed "Liquid Blast" bits, both of which were then on the market. These same bits are among the accused bits which plaintiff alleges infringe its patents. In this amendment, Kinnear mentioned for the first time the expression "jet" drilling, and these were the first claims asserted by Kinnear reading on any "jet" bits. The Examiner refused to enter this amendment on the ground that the subject matter of claims 21 through 34 was not disclosed in the specification Kinnear did not appeal from the Examiner's refusal to enter the amendment and thereafter never again asserted those claims or claims of a similar scope.

63. By amendment dated August 1, 1951, Kinnear added claims 35 through 42 to his application, representing to the Patent Office that these claims were "based on" the subject matter of claims 5 through 14, which had previously been held to be allowable by the District Court. Relying upon this representation, the Patent Office allowed claims

35 through 42 without further examination, and these claims now appear as claims 13 through 20 of the reissue patent.

64. Each of the claims of the reissue patent calls for roller cutters, in so many words, as an essential element of the claimed combination. None of the accused drag bits embodies any sort of roller cutters nor any equivalent structure.

65. Each of the claims of the reissue patent, when properly construed, calls for a drag type blade (either with or without small roller cutters mounted therein) as an essential element of the claimed combination. In this connection, claims 3 through 12 and claims 17 through 20 call for "cutting blades", "blade", "fish-tail type of drill", "forward cutting edges", "oppositely arranged cutting blades", and a "drag type blade" in describing the inner cutter. These terms obviously could apply only to a drag type blade. Although claims 13 through 16 employ the term "cutting elements" to describe the inner cutter, this term is defined in the specification as consisting of either a plain drag type blade, as shown in Figs. 1, 2, 3, 11 and 12, or a drag type blade having slots with small roller cutters mounted therein, as shown in Figs. 8, 9 and 10. None of the accused rock bits (either cone or cross roller type) embodies any sort of blade nor equivalent structure.

66. Each of the claims except 5, 6 and 12 calls for bit body whose lower portion is reduced in thickness forming opposite side faces and terminating in oppositely arranged cutting blades or cutting elements. Claims 5 and 6 call for a similiar structure, described as a "shank" terminating in a forward cutting edge. None of the accused rock or combination bits embodies such a construction.

but on the contrary all such bits are provided with downwardly extending legs which increase, rather than decrease, the size of the bit body at its lower end.

67. Claim 12 calls for spindles having free ends which diverge upwardly and outwardly from the body of the bit. None of the accused bits has spindles with free ends diverging upwardly and outwardly; nor any equivalent structure.

68. Claims 4 through 8, 10 and 11 call for reaming side margins on the fish-tail blades. None of the accused combination bits has side reaming margins on its cutting blades, nor any equivalent structure.

69. Claims 3, 9, 10, 12 and 14 through 19 specify that the flushing fluid issuing from the discharge nozzles is forced between the inner face of a roller cutter and the reduced portion of the bit body through channels or open spaces formed by the sides of the roller cutters and the faces of the reduced body portion. None of the accused bits embodies such a construction nor any equivalent structure.

70. Claims 13 through 16 call for "outer" roller cutters mounted *on* the body of the bit which, in view of the drawings and specifications of the patent, means that they are mounted wholly outside the body of the bit. In all of the accused bits having rolling cutters, which includes all of the accused bits other than drag bits, the roller cutters are mounted within the body of the bit, rather than on the outside of the body of the bit.

71. Claim 19 calls for a bit with roller cutters having a particular type of notched tooth structure which is not found in any of the accused bits.

72. Claim 20 calls for a bit with a drag type blade having slots with roller cutters mounted therein for cutting the inner bottom part of the well hole. None of the accused bits is provided with such a structure, nor any equivalent structure.

73. Reissue Patent No. 23,416 is not a pioneer patent, it being simply an improvement patent in a very crowded field.

74. The claims of the patent are so-called "combination" claims, the alleged invention residing entirely in the combination of the elements recited therein, rather than in the elements themselves, each of which was old and well known at the time the original application was filed.

75. Kinnear was not the inventor of the combination bit, as such. Combination bits were known to the art at least as early as 1915, when Bardeen obtained Patent No. 1,136,203. The other references cited by the Patent Office during the prosecution of the Kinnear applications show that the idea of the combination bit was old long before Kinnear.

76. The following references, none of which were considered by the Patent Office during prosecution of the patents in suit and each of which preceded Kinnear's original filing date by more than one year, show that it was old and well known to position the water courses in a bit body so that the drilling fluid issuing thereform would miss the cutters and strike directly on the bottom of the hole:

(a) Drag bits, and patents and publications relating thereto:

Greenhead (Defendant's Exhibit 1)

Hughes (Defendant's Exhibit 18 and 16)

Dunlop (Defendant's Exhibits 97 and 98)

Lauderback Patent No. 1,727,655

Ragsdale Patent No. 1,961,390

Harrington Patent No. 1,962,589

Composite Catalogue of Oil Field and Pipe Line Equipment (1939 Edition), pages 750, 751 and 754.

Oil Weekly, March 26, 1926, pages 32, 34, 72, 74, 76, 77, 78 and 80.

Oil & Gas Journal, February 22, 1940, page 72.

(b) Cone bits, and patents and publications relating thereto:

Hughes Tool Company's 1911 tri-cone (Defendant's Exhibit No. 31)

Hughes Patents No. 1,256,694 and 1,143,273

Murphy Patent No. 1,647,740

Simpson Patent No. 1,730,301

Collins Patents No. 1,945,258 and 1,992,992

Wright Patent No. 2,049,581

Zublin Patent No. 2,184,067

Oil Bulletin, December 1929, page 1350.

(c) Cross-roller bit, patents and publications:

Reed Patent No. 2,047,110

Williams Patent No. 2,058,750

Catland Patents No. 2,063,012; 2,066,671; 2,068,375; 2,087,500; and 2,089,466.

Zublin Patents No. 2,121,112 and 2,201,570

Composite Catalogue of Oil Field and Pipe Line Equipment (1938 Edition), page 267.

Composite Catalogue of Oil Field and Pipe Line Equipment (1940 Edition), page 716.

Hughes Patent No. 1,327,913

(d) Miscellaneous bits, patents and publications:
Hughes disk bits (Defendant's Exhibits 32, 40 and 41)
Grant shale bit (Defendant's Exhibit 132)
Zublin "Simplex" bit (Defendant's Exhibit 113)
Zublin "Differential" bit (Defendant's Exhibit 114)
Hughes Patent No. 1,204,157
Composite Catalogue of Oil Field and Pipe Line Equipment (1940 Edition), pages 2544-2547).

77. Each of the bits referred to in Findings of Fact No. 76 was shown by clear and substantial proof beyond a reasonable doubt to have been made, sold, and used more than one year prior to the filing date of Kinnear Patent No. 2,380,112.

78. The positioning of the water courses in the accused bits so that the drilling fluid issuing therefrom misses the cutters and strikes directly on the bottom of the hole simply follows the teaching of the prior art.

79. If any of the claims of Reissue Patent No. 23,416 were stretched so as to cover any of the accused drag bits, such claim would read on and be anticipated by each of the prior art references identified in Findings of Fact No. 76(a).

80. If any claim of Reissue Patent No. 23,416 were stretched to cover any of the accused cone bits, such claim would read on and be anticipated by each of the prior art references identified in Findings of Fact No. 76(b).

81. If any claim of Reissue Patent No. 23,416 were stretched to cover any of the accused cross-roller bits, such claim would read on and be anticipated by each of the prior art references identified in Findings of Fact No. 76(c).

82. Plaintiff did not establish a date of invention prior to approximately August 20, 1941, this being the date the draftsman who prepared the original patent drawings first saw Kinnear's drawings of his bit.

83. The following patents, each of which preceded Kinnear's filing date by more than one year, show that it was old and well known to position water courses in the body of a combination bit so that the drilling fluid issuing therefrom would miss the cutters and strike directly upon the bottom of the hole:

Waxler 2,198,849
Kammerer 2,049,543

Moreover, each of the following patents shows that it was old and well known to mount roller cutters on the inner sides of a pair of downwardly extending legs in a combination bit:

(a) Patents which issued more than one year prior to Kinnear's filing date:

Sorensen Patent No. 1,394,769
Scott Patent No. 1,932,487
Kammerer Patent No. 2,049,543
Waxler Patent No. 2,198,849

(b) Patents for which applications were filed prior to the earliest date of invention established by Kinnear:

Kammerer Patents No. 2,244,537 and 2,320,136

84. The positioning of the water courses in the accused combination bits so that the drilling fluid issuing therefrom misses the cutters and strikes directly on the bottom of the hole, and the provision of roller cutters mounted on the inner sides of a pair of downwardly extending legs, simply follow the teaching of the prior art.

85 If any claim of Reissue Patent No. 23,416 were stretched so as to cover any of the accused combination bits, such claim would read on and be anticipated by each of the prior art references identified in Findings of Fact No. 83.

86. Because of the broad scope which Plaintiff asserts for the claims of Reissue Patent No. 23,416, the entire bit manufacturing industry and the entire oil industry are affected by and concerned with the validity of the claims of this patent.

87. Hughes Patent No. 1,204,157, granted in 1915, discloses a drilling bit having a body with a reduced lower portion, spindles mounted on the opposite side faces of the reduced lower portion and roller cutters mounted on these spindles. The reduced lower portion of the bit terminates in two parallel cutting edges which cut the inner bottom portion of the hole. The bit is provided with two pairs of water courses, one pair directing streams of drilling fluid onto the tops of the outer roller cutters, while the other pair directs the streams of drilling fluid onto the bottom of the hole between the cutting edges. In these respects, therefore, the bit disclosed by Hughes is essentially the same as the bit disclosed in the patent in suit even as interpreted by Kinnear. The cutting edges shown in the Hughes bit were intended to destroy the core left in the center of the hole by the outer roller cutters. This function was the same as the intended function of Kinnear's fish-tail blade. In addition, Hughes' cutting edges were intended to cut by a dragging or scraping action, which is the same action as that of Kinnear's fish-tail blade. Accordingly, Hughes' cutting edges were the mechanical equivalent of Kinnear's fish-tail blade. Therefore, the Hughes patent discloses all of the essential elements ar-

ranged in the same relation and performing the same functions as the bit disclosed and claimed in the Kinnear Patent No. Re. 23,416.

88. A person of ordinary skill in the drilling bit art, being familiar with the Hughes Patent No. 1,204,157 could have substituted a conventional fish-tail blade such as that of the Greenhead bit for Hughes' cutting edges, thereby arriving at substantially the same result achieved by Kinnear, without the exercise of invention.

89. The Hughes Patent No. 1,204,157 was not considered by the Patent Office during the course of prosecution of either Original Patent No. 2,380,112 or Reissue Patent No. 23,416.

90. Neither of the patents in suit achieved commercial success.

CONCLUSIONS OF LAW

[1-9] 1. Plaintiff has no cause of action against defendant for alleged breach of confidence (Paragraph 10 of the Complaint) for each of the following reasons:

(a) The essential elements of a cause of action for breach of confidence are

(i) possession by the plaintiff of knowledge or information which is not generally known,

(ii) communication of this knowledge or information by the plaintiff to the defendant under an express or implied agreement limiting its use or disclosure by the defendant, and

(iii) use or disclosure by the defendant of the knowledge or information so obtained in violation of the confidence, to the injury of the plaintiff.

The plaintiff has the burden of proving each of these elements. In this case, plaintiff has failed to prove a single one of these essential elements. On the contrary, the record clearly shows that none of these elements existed.

(b) No cause of action for breach of confidence can accrue to the owner of a patent who has revealed the subject matter thereof to another, by reason of the use or publication by the other after issuance of the patent, of said subject matter, since the issuance of the patent constitutes a publication of its subject matter to the world. In this case, all of the information which Kinnear disclosed to defendant is contained in Patent No. 2,380,112, and plaintiff's sole compalint is that defendant used and published this information after the issue of the patent.

(c) No cause of action for breach of confidence can accrue to the owner of an alleged trade secret by reason of the use or publication of such secret by another, after the owner has revealed his secret to the public by the sale of articles incorporating the secret. In this case, all of the acts on the part of defendant of which plaintiff complains occurred after Kinnear sold the public bits incorporating his alleged trade secret.

(d) Plaintiff's claim is barred by the Texas two-year statute of limitation, Art. 5526, R.C.S.

(e) This being an action at law, plaintiff has the burden of proving that it has been damaged by defendant as an essential part of its cause of action. Plaintiff has failed to prove any such damage.

(f) The proper measure of damages in an action at law for breach of confidence is the plaintiff's loss of profits. Plaintiff failed to prove that it lost any profits on account of any act of defendant. Moreover, plaintiff's business is new and unestablished and the prospective profits of such a business are too speculative to form the basis of an award of damages.

[10-15] 2. Plaintiff has no cause of action against defendant for alleged unfair competition (Paragraph 11 of the Complaint) for each of the following reasons:

(a) The essence of a cause of action for unfair competition is the palming-off of the defendant's goods as those of the plaintiff, thus injuring the reputation or business of the plaintiff by causing the public to believe that the defendant's goods are those of the plaintiff. Unless such a palming-off is alleged and proved by the plaintiff, there can be no recovery for unfair competition. In this case, plaintiff failed either to plead or prove that defendant palmed off any of its goods as those of plaintiff.

(b) This being an action at law, plaintiff has the burden of proving that it has been damaged by defendant as an essential part of its cause of action. Plaintiff has failed to prove any such damage.

(c) The proper measure of damages in an action at law for unfair competition is the plaintiff's loss of profits. Plaintiff failed to prove that it lost any profits on account of any act of defendant. Moreover, plaintiff's business is new and unestablished and the prospective profits of such a business are too speculative to form the basis of an award of damages.

[16-19] 3. Plaintiff has no cause of action against defendant for alleged violation of the anti-trust laws (Paragraph 12 of the Complaint) for the following reasons:

(a) Under the Federal anti-trust laws, 15 U.S.C.A. §§ 1-7, 15 note, the essential elements of a private civil action for treble damages are:

(i) a violation by the defendant of some specific provision of the Federal anti-trust laws with consequent injury to the public, and

(ii) injury to the business or property of the plaintiff by reason of such violation.

The plaintiff has the burden of proving each of these elements. In this case, plaintiff has failed to prove the existence of either of these elements.

(b) The Texas anti-trust laws make no provision for a private civil action for violation thereof. Moreover, no violation of the Texas anti-trust laws has been shown.

[20] 4. Plaintiff has no cause of action against defendant for alleged infringement of Patent No. 2,380,112 because the grant of a reissue patent extinguishes the original. Plaintiff No. 2,380,112 was extinguished by the grant of Re. 23,416. Therefore, plaintiff can predicate no claim on Patent No. 2,380,112.

[21-42] 5. In a patent infringement suit, the plaintiff cannot prevail unless the court finds the patent both valid and infringed. The plaintiff has the burden of proving infringement. Plaintiff has failed to prove that defendant has infringed any of the claims of Patent No. Re. 23,416. On the contrary, the record in this case clearly shows that, for one or more of the following reasons, all of the claims of the patent are limited to a specific form of combination bit and that these claims, as so limited, are not infringed by any of the accused bits:

(a) The claims of a patent define the scope of the monopoly granted to the patentee. Every term recited in a patent claim is a limittion on the patentee's monopoly and nothing is an infringement which does not fall within the terms which the patentee has chosen to express his invention. The claims must be interpreted in the light of the specification, and cannot be construed to cover anything different from or greater than the invention disclosed in the specification. In view of these principles, the claims of Re. 23,416 can cover no more than the specific form of combination bit illustrated and described in the patent. Such a bit has a pair of disk-shaped outer roller cutters mounted on spindles extending outwardly from the opposite side faces of a fish-tail blade (with or without small rollers mounted in slots in the cutting edge of the blade): the bit also has two pairs of water courses through the bit body, the upper pair being positioned to discharge drilling fluid directly onto the top of the outer roller cutters and the lower pair being positioned to discharge drilling fluid down the front faces of the fish-tail blade, in contact therewith. None of the accused bits embodies this specific construction or anything like it. Therefore, none of the accused bits infringes any claim of the patent.

(b) The claims of a reissue patent must be for the same invention as that disclosed in the original patent; and any claim of the reissue which is not for the same invention as that disclosed by the original is void. Patent No. 2,380,112 disclosed nothing more than the specific form of combination bit described in subparagraph (a) above. Therefore, the claims of Re. 23,416 can cover nothing more than that specific form of combination bit and any claim purporting to cover more than that would be void.

(c) A patent owner is bound by the representations made by the applicant to the Patent Office during the prosecution of the patent as to the nature of his invention and the scope of his claims, where such representations were relied on by the Patent Office in granting the patent; and the patent owner is estopped from asserting a broader or more liberal interpretation of the claims of his patent in an infringement suit than the interpretation which the applicant gave to those same claims during the prosecution of the patent. Kinnear repeatedly told the Patent Office that his invention consisted of the particular form of combination bit described in subparagraph (a) above and the Patent Office relied on these representations in issuing the patents in suit. Plaintiff is bound by these representations and is estopped to assert a broader scope for the claims in this case than that urged by Kinnear in the Patent Office.

(d) Where an applicant represents to the Patent Office that certain additional claims are based on the subject-matter of other previously allowed claims, and the additional claims are allowed by the Patent Office on the strength of such representation and without further examination, the additional claims so obtained cannot be construed more broadly than the previously allowed claims and cannot be infringed by any device which does not also infringe the latter. Since Kinnear represented to the Patent Office that Claims 13-20 were "based on the subject matter of" previously allowed Claims 3-12, and the Patent Office thereupon allowed Claims 13-20 on the strength of this representation and without further examination, these claims cannot be construed more broadly than Claims 3-12 and cannot be infringed by any bit which does not also infringe Claims 3-12. Claims 3-12 are obviously limited to the specific form of combination bit described in subparagraph (a) above and are not infringed by any of the accused bits. Therefore, Claims 13-20 must also be so limited and are likewise not infringed by any of the accused bits.

(e) Where the applicant has asserted and then abandoned certain claims during prosecution of the patent, the subject matter of the abandoned claims can not be revived and destored, to the patent by reading such subject matter, by construction, into other claims which are allowed. During prosecution of Re. 23,416, Kinnear asserted claims reading directly on the accused Hughes cone and Reed cross-roller rock bits, but abandoned those claims when the Examiner refused to enter them on the ground that they were not supported by the disclosure. Accordingly, plaintiff cannot interpret any of the claims of the patent in such a way as to cover bits of this type.

(f) A patent claim which reads directly upon the prior art is invalid. A claim will not be so construed if any other construction is possible. The prior art of record in this case contains a great many bits with water courses so positioned as to discharge streams of drilling fluid directly onto the bottom of the hole, at or near the periphery thereof, without first hitting the cutters. Therefore, if the claims of the patent in suit were interpreted as covering the accused bits simply because they incorporate water courses so positioned, as plaintiff contends, the claims would read on all of the prior bits which had water courses similarly positioned, and would be invalid. In order to avoid this result, the claims must be limited to the specific combination of elements recited therein, which is described in subparagraph (a) above.

(g) Combination patents are patents in which the claimed invention resides in a specific combination or arrangement of elements, rather than in the elements themselves. Combination patents should be, they are difficult to obtain. If sustained, they should be, they are, confined strictly to the particular combination claimed. In order to infringe a claim of a combination patent, the accused device must incorporate all the elements of the claimed combination, and omission of a single element avoids infringement. Under the "doctrine of equivalents", a primary or pioneer patent may be held to be infringed by a device which, while it differs in some respects from the language of the claims, nevertheless functions in substantially the same way to perform substantially the same results. A combination patent, particularly one in a crowded art, is entitled to a very limited range of equivalents and is practically limited to the structure shown by the inventor. The doctrine of equivalents is never applied where there is an entire omission of a definite part of the claimed combination without anything being used to function in its place. Every claim of Re. 23,416 is for a combination of elements, the claimed combination consisting of, among other things, outer roller cutters and an inner blade type cutter (either with or without small rollers mounted in the blade). Since none of the accused drag bits have roller cutters or any equivalent thereof, and none of the accused cone and cross-roller bits have blades or any equivalent thereof, these bits cannot infringe any claim of the patent.

(h) Where the accused device is constructed in accordance with the teachings of the prior art and differs from the claimed invention in the very feature upon which patentability of the latter was predicated, there can be no infringement. The accused combination bits are all constructed in accordance with the teachings of the prior art, and differ from Kinnear's alleged invention in the very feature of the latter which the Patent Office regarded as patentable, this being the way in which the outer roller cutters are mounted on the bit body. Kinnear mounted his outer roller cutters on spindles extending outwardly from the opposite side faces of the reduced lower portion of the body, whereas the accused combination bits follow the prior art in mounting in the outer roller cutters on the inner sides of a pair of downwardly extending legs. Therefore, none of the accused combination bits infringe any claim of the patent.

6. There being no infringement, plaintiff has no cause of action against defendant on Patent No. Re. 23,416.

[43] 7. Where an entitre industry is affected by and concerned with the question of validity vel non of a patent, as is true in the case of the patent in suit, the Court should decide the validity question, and should not dispose of the suit on the ground of non-infringement alone.

[44-48] 8. Unless the subject matter of a patent involves both novelty and invention, the patent is invalid, since mere novelty, without invention is insufficient. The question of invention involves the whole of the prior art, and the patentee is charged with knowledge of all of the prior art extant at the time of his alleged invention, whether actually known to him or not. The mere exercise of the skill of the calling does not amount to invention, nor is it invention to combine old elements with no change in their respective functions. Kinnear did no more than to

exercise the skill of the art in combining a group of old and well known elements with no change in their respective functions, and produced nothing which another person of ordinary skill in that art could not have duplicated. Accordingly, what he did does not rise to the dignity of invention and the patent in suit is invalid for that reason.

[49, 50] 9. Where all of the essential elements claimed in a later patent are disclosed in a prior patent, arranged in the same relation and performing the same functions, the prior patent anticipates the later and the later patent is invalid. Accordingly, the patent in suit is anticipated by Hughes Patent No. 1,204,157 and is, therefore, invalid.

[51, 52] 10. The usual presumption of validity attaching to an issued patent disappears when it is shown that the Patent Office failed to consider the most pertinent prior art. The Patent Office failed to consider the Hughes Patent No. 1,204,157, as well as many other of the most pertinent references during the prosecution of the patent in suit. Accordingly, the patent is not entitled to the usual presumption of validity, and this conclusion is not affected by the fact that the patent was issued as the result of a suit under R.S. 4915.

[53] 11. The doctrine of "commercial success" has no application to the facts of this case since the patent in suit has not achieved commercial success. In any event, commercial success cannot take the place of invention.

12. Plaintiff's suit for alleged infringement of Patent No. Re. 23,416 must be dismissed for invalidity of the patent as well as non-infringement by defendant.

APPENDIX B-5

In The
UNITED STATES DISTRICT COURT
For the Eastern District of Texas, Beaumont Division

CIVIL ACTION NO. 2363

KINNEAR-WEED CORPORATION, *Plaintiff*,
v.
HUMBLE OIL & REFINING COMPANY, *Defendant*

FINAL JUDGMENT

This cause having come on to be heard upon the pleadings, the evidence adduced at the trial, the arguments of counsel, and the briefs filed by both parties hereto, and the Court having duly considered the same and having concluded that plaintiff is not entitled to recover on any of the causes of action asserted herein, and having made and filed appropriate Findings of Fact and Conclusions of Law, and having directed the entry of judgment for defendant, it is hereby

ORDERED, ADJUDGED and DECREED:

1. That U. S. Patent No. Re. 23,416 is invalid and void;

2. That U. S. Patent No. Re. 23,416 has not been infringed by defendant, Humble Oil & Refining Company;

3. That Plaintiff, Kinnear-Weed Corporation, take nothing against defendant, Humble Oil & Refining Company,

by reason of any of the causes of action asserted herein, and that said defendant go hence without day as to each and all of said causes of action;

4. That defendant, Humble Oil & Refining Company, recover its costs herein, such costs to be taxed against plaintiff, Kinnear-Weed Corporation for which execution may issue.

Dated: Oct. 10, 1956.

Sgd. LAMAR CECIL
United States District Judge

Appendix C-1

In the
UNITED STATES DISTRICT COURT
for the District of Columbia

Clarence Wellington Kinnear,)
1807 Hazard Street,)
Houston 6, Texas)
Plaintiff) Civil Action No.
v.) 1619-49
John A. Marzall,)
Commissioner of Patents)
of the United States,)
Defendant.)

FINDINGS OF FACT AND CONCLUSIONS OF LAW

Pursuant to Section 52 F.R.C.P., and the opinion of the Court heretofore filed herein, the Court finds the facts and states its conclusions of law thereon, as follows:

FINDINGS OF FACT

1. This is an action under 35 U.S.C. 63 (R. S. 4915), in which plaintiff seeks an adjudication that he is entitled to receive a reissue patent pursuant to 35 U.S.C. 64 (R.S. 4916) containing claims 5 to 14, inclusive of plaintiff's reissue application and an additional claim presented in the amended complaint which is based on claim 16 of the reissue application. The Board of Appeals of the Patent Office refused to grant plaintiff a reissue patent containing claims 5 to 14, inclusive, but did not pass on the additional claim presented in the amended complaint.

2. Plaintiff's invention relates to a rotary drill construction for oil wells. During the prosecution of plaintiff's original application, claims defining the entire drill structure were presented and finally rejected. Thereafter, claims covering the construction details of a roller cutter forming only part of the drill were presented, and the Patent Office gave plaintiff the option of appealing on the finally rejected claims or the roller cutter claims.

3. Plaintiff cancelled the claims directed to the entire drill structure and appealed on the roller cutter claims. After further proceedings the Board of Appeals of the Patent Office allowed two modified claims defining details of construction of the roller cutter and nothing more, and the original patent was issued with these claims.

4. Throughout the proceeding on the original application, both the Patent Office and the plaintiff acted on a record which was incomplete in a vital respect, and both made decisions and committed errors as a result thereof.

5. Had the record of the original application been correct, it is reasonable to infer that plaintiff would have given his attention to the perfection of valid claims on his disclosure for the entire construction of the drill which is now found to be patentable.

6. As a result of the above, plaintiff filed and relied on claims seemingly valid, suggested and approved by the Board of Appeals, which are now found to be invalid and which he would not have reasonably filed except for the omission of the invalidating patent in the record of the original application.

7. The whole course of proceedings in the Patent Office was permeated with error arising out of mutual mistake growing out of an omission in the record.

8. The claims to the entire drill structure were not deliberately cancelled from the original application. There was a vitally defective record causing the mistake out of which arose the error both in the prosecution of claims and in the cancellation of others.

9. Plaintiff filed his application for reissue and therein presented the claim of the original patent and new claims designed more closely to approach the definition of the real invention disclosed. It was established beyond question that the claims of the original patent were invalid and the Board of Appeals held the new claims defined invention and were patentable.

10. A comparison of the specification of the original patent with the claims of the reissue application clearly discloses that the latter are for the same invention intended to be secured by the original patent.

CONCLUSIONS OF LAW

1. Plaintiff is not estopped to rectify the error in cancelling claims from the original application which arose out of mistake.

2. The theory of estoppel, based on the recapture of claims in a reissue application which were deliberately cancelled from an original application, has no application to the instant case.

3. Under the circumstances of this case, the plaintiff is entitled to relief because through mistake he failed to perfect and cancelled claims for the entire structure of the bit, in which the invention is embodied.

4. The Patent Office contributed to the mistake which was made during the pendency of the original application, and under the special circumstances of this case, the Commissioner has the authority and duty to grant amendments which will correct the error.

5. It is unnecessary for the Court to consider whether the reissue application claims patentably distinguish from the claims cancelled from the original application because the estoppel has no application to the issues of this case.

6. Plaintiff is entitled to a reissue patent because of error which arose through "inadvertence, accident or "mistake" as provided for in the reissue statute.

7. A mistake was made of the kind contemplated by the statute and for which a court of equity should give relief.

8. The reissue claims are for the same invention as the original patent, being the same invention intended to be

secured by the original patent as disclosed in the specification of the original patent.

9. The Court has jurisdiction of the case and of the parties, but has no jurisdiction to act on the additional claim presented in the Motion to Amend the Complaint and which is based on claim 16 of the reissue application, because this claim was not passed upon by the Patent Office.

DAVID PINE
Judge.

Dated:
February 9, 1951.

Submitted by:
JOHN W. MALLEY
Attorney for Plaintiff.

Approved as to form:
E. L. REYNOLDS and H. S. MILLER
Attorney for Defendant.

APPENDIX C-2

95 Federal Supplement 55

Kinnear v. Marzall, Commissioner of Patents.
Civ. No. 1619-49.

UNITED STATES DISTRICT COURT
District of Columbia

Jan. 23, 1951.

Action by Clarence Wellington Kinnear against John A. Marzall, Commissioner of Patents of the United States to authorize the reissue of an invalid patent the claims of which were drawn to rotary drill construction for use in drilling of oil wells. The District Court, Pine, J., held that where issuance of invalid patent by patent office resulted from omission from record of prior patent and ommission caused mistake out of which arose the error, both in the prosecution of claim and cancellation of others, plaintiff was entitled to the reissue of patent on cancelled claim and since vitally defective record caused mistake out of which arose the error, plaintiff was not estopped from seeking relief requested.

Judgment entered for plaintiff on reissue claims 5 to 14 both inclusive.

Judgment for defendant on claim 16.

1. Patents—141 (6)

Where throughout original proceedings on original application both Patent Office and plaintiff acted on a record incomplete in a vital respect due to omission of a prior invalidating patent, and on appeal both plaintiff and board of appeals, acting without knowledge of prior invalidating patent, made decisions and took action which was inconceivable either would have taken had they had knowledge of prior patents, plaintiff was entitled to a reissue patent on abandoned valid claims, and plaintiff was not estopped from seeking reissue. 35 U.S.C.A. §§ 63, 64.

2. Patents—141 (1)

Reissue claims are for same invention as original patent if reissue fully describes in claims very invention intended to be secured by original patent and both claims and specifications must be considered in reaching such determination. 35 U.S.C.A. §§ 63, 64.

3. PATENTS—141(5)

District Court did not have jurisdiction to determine patentability of additional patent claim not passed on by Board of Appeal.

John W. Malley, of Cushman, Darby & Cushman, Washington, D. C., for plaintiff.

E. L. Roynolds and H. S. Miller, Washington, D. C. for defendant.

PINE, District Judge.

This is an action under 35 U.S.C.A. § 63, R.S. § 4915, to authorize the reissue of an invalid patent pursuant to 35 U.S.C.A. § 64, R.S. § 4916. The claims are drawn to rotary drill construction for use in the drilling of oil wells.

Plaintiff's original application contained 25 claims. They were rejected on the prior art. Amendments were filed, culminating in the final rejection of all claims. Thereafter still further amendments were filed. These covered only the construction details of a roller cutter forming part of the drill. They were not entered, on the ground that the application was under final rejection and the amendments did not place the application in condition to be passed for issue, and plaintiff was advised that he had the option of basing an appeal either on (1) the claims as finally rejected or on (2) the claims contained in the last amendments. On the record in the case as then made, it appeared to plaintiff that he would prevail on appeal by adopting the second alternative, and thereby would obtain patent protection. Accordingly, he appealed on the claims contained in the last amendments, and canceled the others drawn to the entire structure.

The Board of Appeals confirmed his view in this regard, and held that there was a patentable difference between the plaintiff's device and that disclosed by the prior art, but that his claims failed to define the difference. Acting on this holding, plaintiff submitted two new claims intended to cure the defect, and the Board held that they, if properly presented, should be entered and allowed. Whereupon plaintiff canceled the claims on appeal, substituted the claims approved by the Board, and patent was issued thereon. These claims, two in number, like the canceled claims from which they evolved, defined the details of construction of the roller cutter, and nothing more. They likewise appeared on the record made to be sufficient to afford patent protection to the plaintiff; but it soon developed that he was in error in this respect and that the patent issued to him was inadequate. He thereupon filed his application for reissue, presenting the two original patented claims and other claims of like nature, and also new claims designed more closely to approach the definition of the real invention disclosed. Then for the first time he was met by the citation of a patent, not previously in the record nor cited in the original proceedings, which established beyond question that his original patent for the roller cutter was invalid. The original patented claims and others of like nature were accordingly rejected on the newly cited patent, and they have been abandoned.[1] However, the Board of Appeals held that the new claims of plaintiff defined invention and were patentable, but rejected them on the ground of estoppel.

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[1] Two other claims were likewise rejected on the prior art, but they have been abandoned and have no relevancy to the questions here under discussion.

Plaintiff thereupon brought this action to authorize the reissue of an invalid patent under 35 U.S.C.A. § 64, supra, which provides that "Whenever any patent is wholly or partly inoperative or invalid, by reason of a defective or insufficient specification, or by reason of the patentee claiming as his own invention or discovery more than he had a right to claim as new, if the error has arisen by inadvertence, accident, or mistake, * * * the commissioner shall, on the surrender of such patent * * * cause a patent for the same invention * * * to be reissued to the patentee * * *."

There is no dispute that the prior patent is invalid, and that it is invalid by reason of an "insufficient specification,"[2] and by claiming more than he had a right to claim as new." There is also no dispute as to the patentability of plaintiff's claims, and that question is not before me.

The dispute is whether the error arose by "inadvertence, accident, or mistake," and whether the application is for the same invention. I shall discuss the disputed issues in the order named.

[1] It appears from the facts above set forth that throughout the proceeding on the original application, both the Patent Office and the plaintiff acted on a record which was not only incomplete, but incomplete in a vital respect, and both made decisions and committed errors as a result thereof. To be sure, as it now turns out, the examiner acted correctly in refusing to enter the appealed claims on the roller cutter, notwithstanding this defective record; but the plaintiff, in exercising his option as to the

---

[2] In the sense used in the statute, specification covers both specification and claims. American Automotoneer Co. v. Porter, 6 Cir. 232 F. 456.

course he should pursue on appeal, chose one fatal to his rights because of such defective record. It is not unreasonable to infer that, had the record been correct, plaintiff would not have prosecuted further his roller cutter claims, but would have given his attention to the perfection of valid claims on his disclosures for the entire construction which are now found to be patentable. On appeal, both the plaintiff and the Board of Appeals, acting without knowledge of the prior invalidating patent, made decisions and took action which it is inconceivable either would have taken had they had knowledge of the prior patent. As a result, plaintiff now finds himself in the position of having filed and relied on claims seemingly valid, suggested and approved by the Board of Appeals, which now are found to be invalid ~~and~~ which he would not have reasonably filed except for the omission in the record. Thus the whole course of the proceedings was permeated with error arising out of mutual mistake growing out of an omission in the record, and causing issuance of the invalid patent. I am therefore of the opinion that this is a mistake of the kind contemplated by the statute and one for which a court of equity should give relief.

Defendant, however, contends that the remaining claims on the reissue application are of substantially the same scope as the canceled claims, and that plaintiff therefore is estopped from asserting that his error arose by "inadvertence, accident, or mistake." In this connection he relies on In re Guastavino, 83 F.2d 913, 23 C.C.P.A., Patents, 1179, G-H Rim Co. v. Firestone Steel Products Co., 6 Cir., 29 F.2d 825; and In re McKesson, 56 App. D.C. 401, 11 F.2d 999. These hold that where a claim is deliberately canceled in the original application, it cannot be recaptured in a reissue application, the theory being that the deliberate cancelation precludes a holding of "inadvertence, accident, or mistake."

But this theory, though convincing in some circumstances, has no application in others such as are present in the instant case, and I can find no basis for concluding that the authorities cited are apposite. Here we have a vitally defective record causing the "mistake" out of which arose the "error,"[3] both in the prosecution of claims and in the cancelation of others. To hold that plaintiff is estopped under such circumstances would thwart the statute, for the relief provided thereby to rectify error in presenting claims arising out of mistake would be nullified upon the concomitant error in canceling claims arising out of the same mistake. Or, as stated in Florence-Mayo Nuway Co. v. Hardy, 4 Cir., 168 F.2d 778, 784, in an opinion by Judge Parker, "It would seem absurd * * * to say that under the statute patentee is entitled to relief because of inadvertence and mistake in failing to claim his invention but, under a court-made rule, must be denied any real relief because through the same inadvertence or mistake he canceled a claim in which the invention was embodied."

The Supreme Court, in Morey v. Lockwood, 8 Wall. 230, 75 U.S. 230, 19 L.Ed. 339, in passing upon a somewhat analogous situation, also gives support for the view here expressed. There the applicant was induced by the Patent Office to narrow his claims and patent was issued thereon. Then it was discovered that the patent cited by the Patent Office was no objection to the original broad claims and a reissue was sought on claims in substantially their original form. These were allowed, and patent issued thereon. The reissued patent was attacked as invalid, but the Supreme Court, in sustaining it, noted that the Patent Office, as in this case, contributed to the mistake, and held that "the Commissioner had full authority to grant the amendment; and, under the special circumstances of the case, it would seem to have been a duty, as the inventors were led into the error by himself, * * *." See also In re Crowell, 81 F.2d 402, 23 C.C.P.A., Patents, 859, which sustains the views set forth here in a case similar to the one at bar.

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[3] These are the words of the statute. 35 U.S.C.A. § 64

Although plaintiff argues convincingly on the fact that the reissue claims patentably distinguish from the original canceled claims in the recitation of features and elements found by the Board of Appeals to define invention, it is unnecessary for me to reach this point under my view of the law as above expressed. I am therefore of the opinion that estoppel has no application to the issues in this case.

[2] On the second point, i.e., whether the reissue claims are for the "same invention" as the original patent, little need be said. The law, generally stated, is well settled by the Supreme Court, which has declared that they are for the same invention "if the reissue fully describes and claims the very invention intended to be secured by the original patent".[4] Both the claims and specification must be considered in reaching this determination.[5] In discussing this

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[4] U. S. Industrial Chemicals, Inc. v. Carbide, etc. Corp., 315 U.S. 668, 675, 62 S.Ct. 839, 843, 86 L.Ed. 1105.

[5] In re Mayo, 129 F.2d 700, 29 C.C.P.A., Patents, 1192; Florence-Mayo Nuway Co. v. Hardy, supra.

point, defendant omits reference to the specification of the original patent, and concerns himself solely with the claims of that patent in support of his contention that the reissue claims are not for the same invention. Therein lies his error, for a comparison of the specification of the original patent with the reissue clearly discloses, without the necessity for further particularization, that the latter is for the same invention under the definition above set forth. The case cited by defendant[6] is distinguishable on the facts and to a large extent is concerned with whether the cancelation of certain claims was due to inadvertence, accident, or mistake.

Finally, in this connection [illegible] is significant to observe that the Board of Appeals in this case did not reject on the ground of failure to claim the same invention although that ground was given by the examiner, but pitched its decision on estoppel.

[3] So far as the additional claim 16 is concerned, this court has no jurisdiction to act thereon, because the same was not passed upon by the Board of Appeals. Cherry-Burrell Corp. v. Coe, 79 U.S. App D.C. 124, 143 F.2d 372.

Judgment will therefore be entered for plaintiff on reissue claims 5 to 14, both inclusive. Judgment will be entered for defendant on claim 16. Counsel will submit the same along with findings of fact and conclusions of law.

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[6] In re Hicks, 58 App D.C. 291, 29 F.2d 879

APPENDIX C-3

In the
UNITED STATES DISTRICT COURT
for the District of Columbia

Clarence Wellington Kinnear,) 1807 Hazard Street,) Houston 6, Texas) Plaintiff) v.) John A. Marzall,) Commissioner of Patents) of the United States,) Defendant.)	Civil Action No. 1619-49

JUDGMENT

This action came on to be tried before the Court, and the Complaint having been amended by motion at the trial, and the evidence adduced by the parties having been heard, and the Court having made its findings of fact and conclusions of law, it is hereby:

Adjudged, that plaintiff is entitled, according to law, to receive a patent for his invention, as specified in claims 5 to 14, inclusive of the reissue application, and the Commissioner of Patents is authorized to issue such a patent upon plaintiff filing in the Patent Office a copy of this adjudication and otherwise complying with the requirements of law, and that the complaint be dismissed as to the additional claim based on claim 16 of the reissue application, which was presented in the amended complaint with costs to defendant.

(sgd.) DAVID PINE
Judge

Dated:
February 9, 1951

Submitted by:
JOHN W. MALLEY
Attorney for Plaintiff.

Approved As To Form:
E. L. REYNOLD and H. S. MILLER
Attorney for Defendant.

PATENTS

Oct. 16, 1951 C. W. KINNEAR Re. 23,416

DRILL

Original Filed Jan. 2, 1942 3 Sheets—Sheet 1

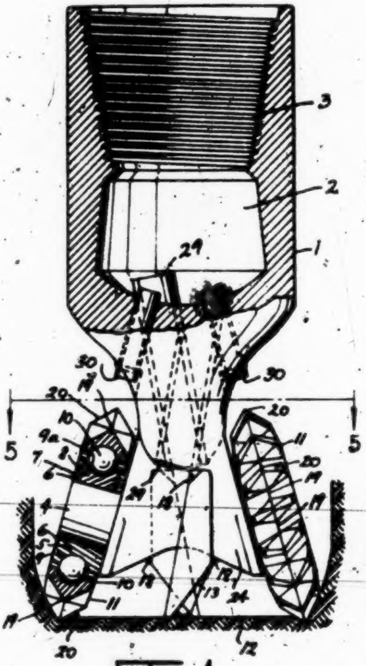
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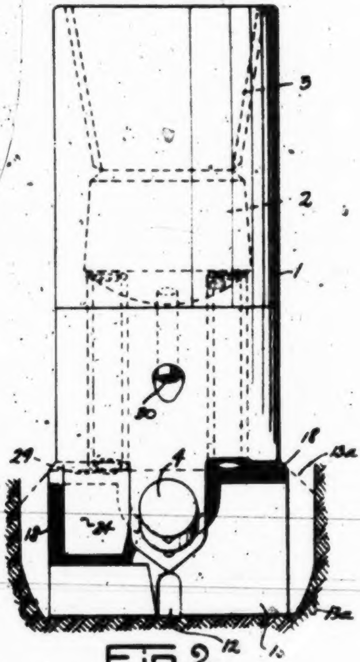
Fig. 1.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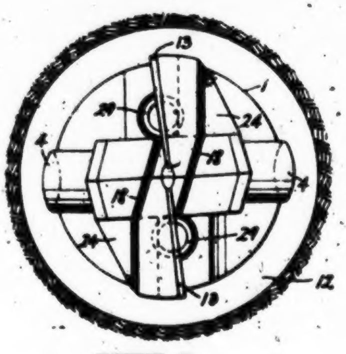
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Fig. 3.

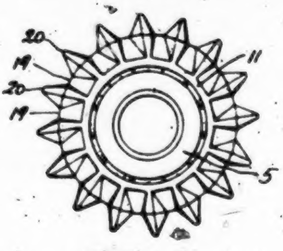
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Fig. 4.

INVENTOR
Clarence W Kinnear

BY

E. V. Hardway
ATTORNEY

Oct. 16, 1951 C. W KINNEAR Re. 23,416

DRILL

Original Filed Jan. 2, 1942 3 Sheets-Sheet 2

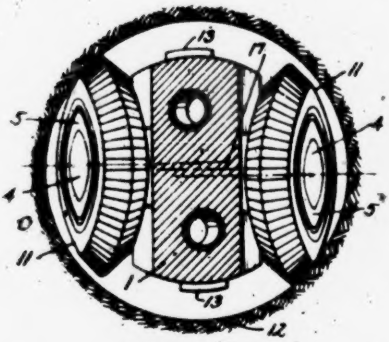
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Fig. 5.

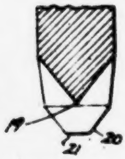

Fig. 7.

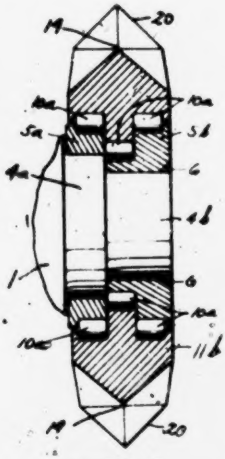
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Fig. 6.

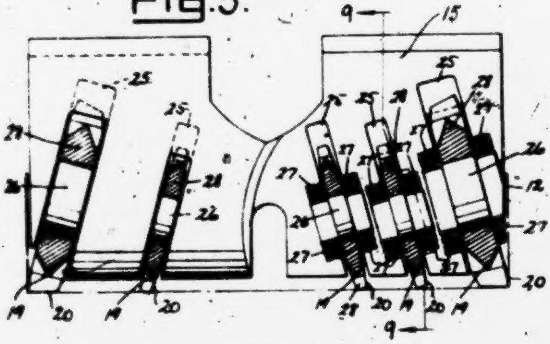
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Fig. 8.

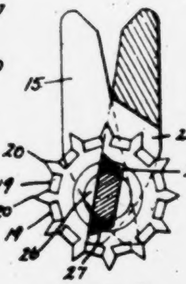
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Fig. 9.

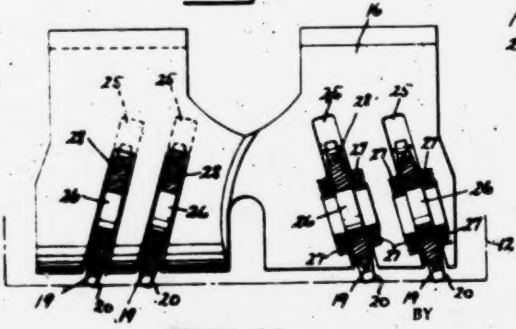
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Fig. 10.

INVENTOR
Clarence W Kinnear
BY
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ATTORNEY

Oct. 16, 1951 C. W. KINNEAR **Re. 23,416**

DRILL

Original Filed Jan. 2, 1942 3 Sheets-Sheet 3

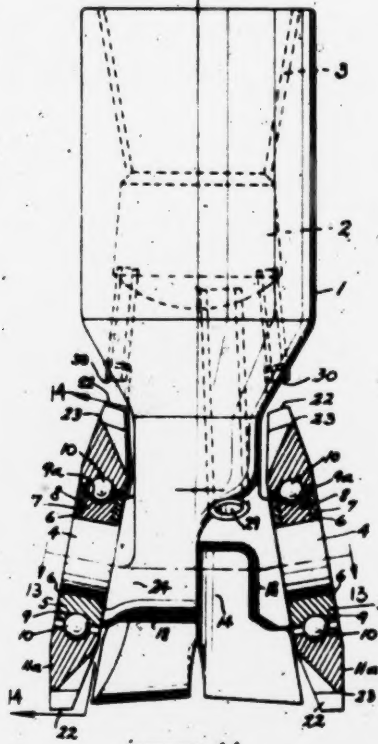
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Fig. 11.

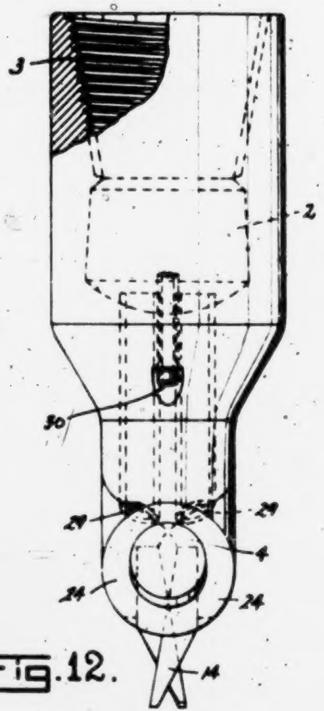
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Fig. 12.

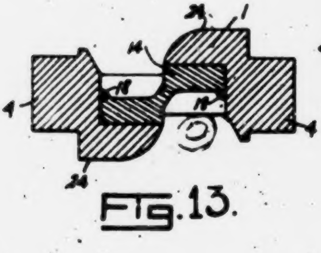
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Fig. 13.

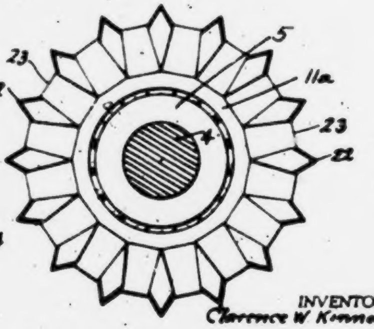
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Fig. 14.

INVENTOR
Clarence W. Kinnear

By E. V. Hardway
ATTORNEY

Reissued Oct. 16, 1951 **Re. 23,416**

UNITED STATES PATENT OFFICE

23,416

DRILL

Clarence Wellington Kinnear, Houston, Tex.

Original No. 2,380,112, dated July 10, 1945, Serial No. 425,408, January 2, 1942. Application for reissue June 7, 1946, Serial No. 674,941

18 Claims. (Cl. 255—71)

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates the additions made by reissue.

This invention relates to new and useful improvements in a rotary drill bit.

An object of the invention is to provide a drill bit to be used in rotary drilling of oil wells, or deep water wells or the like, said drill bit having cutting elements thereon for the penetration of the earth and suitable for either hard rock, shale, or tough sticky earth formation drilling.

Another object of the invention is to provide a rotary drill bit of the type above referred to, with outer roller cutting elements being so constructed and arranged to cut a furrow or groove in the earth formation around the outer bottom periphery of the well hole to weaken the remaining portion of the earth formation on the inner bottom part of the hole to be easily cut or torn up by other cutting elements arranged and provided for that purpose during initial hole drilling operations.

A further object of the invention is to provide a rotary drill bit of the character described having outer lower roller cutting elements extending outwardly and downwardly from the vertical central axis of the bit frame or body, and positioned on the outside of the frame or body of the bit, and having other cutting elements underneath the frame or body of the bit.

A further object of the invention is to provide a rotary drill bit of the character described having a frame or body larger on the upper portion with a suitable connecting means for a drill stem, and a centralized thinner or lesser dimension on the lower portion for the attachment of the cutting elements.

A further object of the invention is to provide a rotary drill bit of the character described having roller cutting elements thereon and being so designed that the weight of the drill stem will shear the earth formation from the cutting teeth and from between the cutting teeth on the roller cutting elements as the drill bit is rotated and forced through the earth.

A further object of the invention is to provide a rotary drill bit of the character described having flushing fluid courses so positioned and directed as to permit the flushing fluid to flush across the forward faces of the cutting elements cutting the inner bottom portion of the well hole and at the same time blast the earth formation at the bottom of the hole near the bottom side of the roller cutting elements cutting the outer bottom portion of the well hole.

A further object of the invention is to provide a rotary drill bit of the character described having roller cutting elements with a series of serrations or cutting teeth and a series of crotches spaced between the cutting teeth, and another series of cutting edges within the crotches between the teeth.

A further object of the invention is to provide a rotary drill bit of the character described having a thin scrape or fish tail like blade with longitudinal slots, and having bearing pins or axles spanning the slots and welded to the thin blade on each side of the slots, and with roller cutting elements adapted to rotate about the pins.

A further object of the invention is to provide a rotary drill bit of the character described having roller cutting elements mounted on anti-frictional bearing assemblies.

A further object of the invention is to provide a rotary drill bit of the character described with roller cutting elements having a series of spaced cutting teeth with a series of associated crotches spaced between the cutting teeth, and with the lower part of the crotches sharpened and shaped ridge like for splitting the chip or cuttings so that weight applied from the drill stem will aid in shearing earth cuttings from between the cutting teeth, away from the crotches and force the cuttings up and away from the roller cutters during drilling operation.

Finally, it is one of the primary objects of the present invention to provide a drilling tool of the character described embodying a novel combination of a fish tail type of drill for drilling through soft formation that would adhere to toothed rolling cutters and impede the progress thereof with specially designed rolling cutters that will readily penetrate hard formation which could not be efficiently penetrated by a fish tail drill working alone, thereby producing a drilling tool that will efficiently operate under all conditions encountered in well drilling.

These and other objects of the invention will in part be obvious and will in part be more fully disclosed in the accompanying drawings which show by illustration three embodiments of the invention, in which:

Figure 1 is a vertical side view partly sectional of the drill bit with the cutting elements mounted thereon, and positioned at the bottom of a well hole;

Figure 2 is a vertical side view of the drill bit body turned at 90 degrees to Figure 1, showing the drag type bit blade welded to the body, and positioned at the bottom of a well hole;

Figure 3 is a bottom plan view of the bit body shown in Figure 1, with the drag type blade welded thereon, and positioned in a well hole.

Figure 4 is a side view of one of the outer roller cutters mounted on an antifrictional bearing assembly as shown in Figure 1;

Figure 5 is a cross section through section line 5—5 of Figure 1, showing the lower part of the bit body with cutting elements thereon and positioned in a well hole;

Figure 6 is a side view partly sectional of a roller cutter assembly mounted on an axle pin showing the application of cylindrical type antifrictional bearings;

Figure 7 is a sectional side view of a roller cutter cutting tooth with the outer cutting point dubbed and sharpened.

Figure 8 is a vertical side view partly sectional showing another embodiment of the drag type blade having roller cutter assemblies attached thereon, and adapted to cut the full gauge of the well hole to be drilled;

Figure 9 is a section taken through section line 9—9 of Figure 8, showing a roller cutter assemby mounted on the drag type bit blade and being turned at 90 degrees to Figure 8;

Figure 10 is a vertical side view of a drag type bit blade showing roller cutter assemblies partly sectional attached thereon, and adapted to cut a lesser gauge than the full gauge of the hole to be drilled;

Figure 11 is a vertical side view partly sectional of another embodiment of the drill bit;

Figure 12 is a vertical side view partly sectional of the drill bit body with drag type blade attached thereto and turned at 90 degrees to Figure 11;

Figure 13 is a cross section of the drill bit body and drag type blade taken through section line 13—13 of Figure 11;

Figure 14 is a vertical side view partly sectional showing a roller cutter mounted on an antifrictional bearing assembly, and attached to an axle pin and being taken through section line 14—14 of Figure 11.

The invention will be better understood from a detailed description thereof wherein like numerals denote like parts in the accompanying drawings of the present embodiments of the invention.

The numeral 1 designates the frame or body of the bit which has an interior cavity 2 formed in the upper end thereof, said cavity being provided with a threaded portion 3 to receive a drill stem. The middle and lower part of the bit body narrows down to a lesser dimension forming a downwardly extending central shank. This downwardly extending central shank is somewhat enlarged on its lower portion and has outwardly and upwardly extending axle pins 4 thereon. Races 5 are fitted on the axle pins 4 and secured thereto by welding material 6. These races in Figure 1, and Figure 11, have antifrictional bearing assembly holes 7 in which are placed bearing retaining plugs 8 with race grooves 9 in the races and race grooves 9a in the retaining plugs for retaining ball bearings 10 which are adapted to rotate about the races; however the races and bearing applications are different as shown in Figure 6. It being understood that any well known bearing and race application could be used. In Figure 6, the axle pin is of larger diameter adjacent the bit body 1 at 4a and of smaller diameter on the outer end 4b. A larger diameter race 5a is fitted on axle pin portion 4a and race 5b is fitted on axle pin portion 4b and secured thereto by welding material 6. Cylindrical antifrictional bearings 10a are mounted on the races 5a and 5b and are adapted to rotate about said races. The middle set of cylindrical antifrictional bearings rotate about a race surface of lesser diameter than the two outer sets of cylindrical antifrictional bearings.

Cutting elements forming the cutting portion of the drill bit are of different forms and character and are placed at different positions and angles with respect to each other in different embodiments of the invention to meet the requirements of drilling in different localities of the earth. These cutting elements consist in different embodiments of the invention of outer bottom roller cutters 11, 11a, and 11b to be used for cutting the outer bottom parts of well hole 12, and inner bottom cutting elements 13, 13a, 14, 15, and 16 to be used for cutting the inner bottom part of well hole 12, which are attached by welding 18 to either one of the bit bodies. Different inner bottom cutting elements are selected to suit the substance being drilled. The inner bottom cutting elements 13, 14, and 16 are adapted to cut a lesser gauge than the full gauge of well hole 12 while the inner bottom cutting elements 13a, and 15 are adapted to cut the full gauge of hole 12. It being shown in Figure 2, that drag blade 13 could easily be extended wider at 13a to cut the full gauge of the hole. Hard surface material may be attached to any or all of the cutting elements or bearing surfaces in the well known manner. The outer bottom roller cutters are mounted on antifrictional bearings as shown and situated to lean inwardly at the top and outwardly at the bottom, and to rotate about said bearings and exteriorly of the frame or body of the bit which will help prevent debris or cuttings from clogging or stopping the rotation of said roller cutters. The axis of the axle pins 4 about which the outer bottom roller cutters are adapted to rotate are each oppositely set forward of the diametrical center line 17 of the drill bit as shown in Figure 5, thus allowing the outer bottom roller cutters to cut the gauge of the hole on the forward outer side bottom portion of said roller cutters during rotating operation and also allowing clearance between the well hole gauge and the back and lower portion of the outer bottom roller cutters during rotation; however, the axis of the axle pins could be placed on the diametrical center line of the bit if desired. Cutting teeth and crotches between said cutting teeth on the roller cutters shown are of unique design and are very important as the weight of the drill pipe will aid in shearing the debris or cuttings from the cutting teeth, and from the crotches between the cutting teeth during drilling operation. In Figures 1, 4, 6, 7, 8, 9, and 10 the roller cutters all have spaced sharpened ridge like cutting edges 19 centrally located within the crotches between the spaced cutting teeth 20 for splitting the chip or cuttings. In Figure 7, the cutting tooth is somewhat dubbed off and sharpened on the outer cutting point 21. In Figures 11 and 14, the roller cutters 11a have spaced cutting teeth 22 with spaced sharpened ridge like cutting edges 23 within the crotches between said cutting teeth. The spaced sharpened cutting edges 23 are situated to one side of the center of the spaced cutting teeth 22 for forcing the main portion of the chips or cuttings toward the inner part of the well hole during drilling operation.

The construction of the inner bottom cutting elements are of different design as aforestated, and are placed adjacent to blade supports 24 of the bit body and firmly welded thereto as shown, thereby taking a great part of the downward thrust off of the outer roller cutting elements when drilling. Inner bottom cutting elements 13, 13a, and 14 are of the fish tail drag type blade, and inner bottom cutting elements 15, and 16 are drag type blades having slots 25 therein with axle pins 26 positioned across said slots and embedded in and secured to said blades 15, and 16, by welding material 27. Roller cutters 28 are mounted on axle pins 26 and adapted to rotate about said axle pins, and through said slots 25.

Large fluid course ducts 29 and smaller fluid course ducts 30 extend through the drill bit body and communicate with the interior of a drill stem (not shown) whereby flushing fluid forced through said drill stem is adapted to wash debris and cuttings from the cutting elements of the drill bit during drilling operation.

In the operation of the drill bit a suitable drill stem is attached to the threaded portion thereof and the device is rotated and fed forward into the earth. As the drill rotates the roller cutting elements rotate about their respective axle pins and cut deepened grooves in the earth formation within their path of rotation and the drag type cutting elements cut or tear the remaining portion of the earth formation within their path of movement. The roller cutters being of extraordinary design cut chips or cuttings from the bottom of the well hole and the chips or cuttings caught in the crotches between the cutting teeth of the roller cutters are forced from the crotches and out into the open hole by the aid of the weight of the drill stem urging the cutting teeth to slice through the earth and to take hold of other chips or cuttings. Flushing fluid is forced through the drill stem into the bit body, and emerges through the fluid course ducts for washing debris and cuttings from the drill bit. The large fluid course ducts are so positioned on the bit body with respect to the cutting elements that they are adapted to wash down the front cutting faces of the inner cutting elements and blast the bottom of the well hole near where the outer roller cutters are taking their portion of the cut with the same direct blast. It being remembered that flushing fluid under high pressure will dislodge and cut a great amount of the cuttings from the bottom of the well hole. This position of these fluid course ducts with respect to the cutting elements, and with respect to their emerging on the exterior surface and well upon the outside surface of the bit body are of extreme importance as this allows the flushing fluid to directly blast cuttings away from the outer side periphery of the bit body, directly blast down the front faces of the inner cutting elements, directly blast along the side of the outer bottom roller cutters, and directly blast the bottom of the well hole in the rear proximity of where the inner bottom cutting elements and the outer bottom roller cutters take their respective cuts in the substance being drilled. The smaller fluid course ducts directly blast the cutting teeth on the outer bottom roller cutters as the said teeth on the cutters rotate past the port holes of said smaller fluid course ducts during drilling operation.

It is obvious that many changes may be made in the details of construction and arrangement of parts by one skilled in the art without departing from the scope of the invention.

[Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:]

What I claim is:

[1. A rolling cutter for use in well drills comprising, a disc-like body having on its periphery cutting teeth terminating in outwardly directed cutting edges and spaced apart so as to leave notches, or depressions, between the cutting teeth, that portion of the notches, or depressions, forming the body of the rolling cutters, being beveled so as to form sharp cutting edges extending circumferentially of the disc-like body, the cutting edges of the teeth extending radially further than the circumferential cutting edges of the notches.]

[2. A rolling cutter for use in well drills comprising, a disc-like body having on its periphery cutting teeth spaced apart so as to leave notches between the cutting teeth, that portion of the notches, forming the body of the rolling cutter, being beveled so as to form cutting edges extending, approximately, circumferentially of the disc-like body, the cutting edges of the teeth extending radially further than the circumferential cutting edges of the notches.]

3. A rotary drilling tool comprising, a body having means at its upper end for connecting a drill stem thereto and whose lower portion is reduced in thickness, forming opposite side faces, and terminating in oppositely arranged cutting blades, a spindle on each side face, a rolling cutter on each spindle adjacent the corresponding side face, said body having channels leading therethrough and positioned to direct streams of flushing fluid between the forward faces of the blades and the adjacent sides of the respective rolling cutters and against the bottom of the well bore.

4. A rotary drilling tool comprising, a body having means at its upper end for the connection of a drill stem thereto and whose lower portion is reduced in thickness so as to form side faces on opposite sides of said reduced portion, the lower end of the reduced portion being formed into a blade arranged to operate against the bottom of the bore, said blade merging in side reaming margins arranged to ream the bore to gauge, a spindle on each side face of the body, a rolling cutter on each spindle, the rolling cutters being of dimensions and position to penetrate into the virgin earth deeper than, and in front of, the lower portions of the corresponding reaming margins.

5. A rotary drilling tool comprising, the combination with a fishtail type of drill having a shank which terminates in a blade having a forward cutting edge to operate against the bottom of a well bore and side reaming edges adapted to ream the bore, spindles anchored to opposite sides of said blade, rolling cutters on the spindles set at angles to the vertical axis of the drill to operate against the outer bottom portion of the bore in advance of the lower portions of the respective reaming edges.

6. A rotary drilling tool comprising, the combination with a fishtail type of drill having a substantially flat shank which terminates in a forward cutting edge to operate against the bottom of a well bore and side reaming edges adapted to ream the bore to gauge, spindles anchored to opposite sides of said shank, rolling cutters on the spindles set at angles to the vertical axis of the drill to operate against the outer bottom portion of the bore in advance of the lower portions of the respective reaming edges.

7. A rotary drilling tool comprising, the combination with a fishtail type of drill having a body whose lower portion is reduced in thickness form-

Patent Office misprint "rear" should read "near" see Certificate of Correction at end of Patent.

ing a shank with approximately flat faces on opposite sides and terminating at its forward end in a cutting edge to operate against the bottom of a well bore, and having reaming edges at its side margins; said body, shank and cutting and reaming edges forming a unitary structure, upwardly diverging spindles, one on each side face of, and formed integrally with the shank, rolling cutters mounted on the spindles and set at angles to the vertical axis of the drill to operate against the outer bottom portion of the bore in advance of the lower portion of the respective reaming edges.

8. A rotary drilling tool comprising, the combination of a drill having a body provided with means at the upper end thereof for the connection of a drill stem thereto, the middle and lower portion of the body being narrowed down to a lesser dimension forming a downwardly extended central shank whose lower end terminates in a forward cutting edge to operate against the bottom of a well bore and having side reaming edges adapted to ream the bore to gauge, upwardly diverging axle pins anchored to the outer sides of the shank, one on each side thereof and approximately midway between said reaming edges, rolling cutters mounted on said axle pins and set at angles to the vertical axis of the drill to operate against the outer bottom portion of the bore in advance of the lower outer portions of the respective reaming edges.

9. A rotary drilling tool comprising, the combination with a fishtail type of drill having a body whose upper end is formed for the connection of a drill stem thereto and whose lower portion is reduced in diameter forming a shank having side faces on opposite sides thereof and whose lower end terminates in oppositely directed cutting blades whose lower, or forward, ends have cutting edges adapted to operate against the bottom of a well bore, the outer margins of said blades being formed with reaming edges to ream the sidewalls of the bore, upwardly diverging spindles one on each side of the shank and anchored thereto, rolling cutters mounted to rotate about the respective spindles, the inner side of each rolling cutter being adjacent the rear face of one of said blades and being spaced from the corresponding forward face of the other blade to form channels between the rolling cutters and the opposing forward faces of the cutter blades, said body having passageways leading therethrough and terminating in the upper ends of said channels through which flushing fluid from the drill stem may be forced between the forward faces of said blades and the opposing sides of the rolling cutters and delivered against the bottom of the well bore.

10. A rotary drilling tool comprising, the combination of a drill having a body provided with means at the upper end thereof for the connection of a drill stem thereto, the middle and lower portion of the body being narrowed down to a lesser dimension forming a downwardly extended shank whose lower end terminates in a forward cutting edge to operate against the bottom of a well bore and having side reaming edges adapted to ream the bore to gauge, upwardly diverging axle pins anchored to the shank, one on each side thereof and approximately midway between said reaming edges, rolling cutters mounted on said axle pins and set at angles to the vertical axis of the drill to operate against the outer bottom portion of the bore, said body having passageways leading therethrough and positioned to direct streams of flushing fluid between the sides of the shank and the adjacent sides of the respective rolling cutters and against the bottom of the well bore.

11. A rotary drilling tool comprising, a body having means at its upper end for the connection of a drill stem thereto and whose lower portion is reduced in thickness so as to form side faces on opposite sides of said reduced portion, the lower end of the reduced portion being formed into a blade arranged to operate against the bottom of the bore, said blade merging in side reaming margins arranged to ream the bore to gauge, a spindle on each side face of the body, said body, shank, blade and spindles forming a unitary structure, a rolling cutter on each spindle, the rolling cutters being of dimensions and positioned to penetrate into the virgin earth in front of the corresponding reaming margins.

12. A rotary drilling tool comprising, the combination of a drill having a body provided with means at its upper end for the connection of a drill stem thereto and having a blade at its lower end to operate against the bottom of the bore and provided with side faces, spindles anchored to the opposite side faces of the body and having free ends which diverge upwardly; rolling cutters mounted to rotate about the spindles and being of dimensions and positioned to operate against the outer bottom portion of the bore, said body having water courses therethrough positioned to direct streams of flushing fluid between the said side faces of the body and the adjacent sides of the respective rolling cutters and against the bottom of the well bore.

13. A rotary drill bit adapted to be attached to a drill stem comprising a body having an upper portion and a lower portion, said lower portion having a plurality of outer roller cutters mounted thereon in circularly spaced relation from one another to cut in substantially the same circular path defining the outer bottom part of a well hole, said lower portion having cutting elements mounted thereon within the path of travel of said outer roller cutters and circularly spaced in trailing relationship thereto to cut the inner bottom part of the well hole at substantially the same level as the cut taken by said outer roller cutters, a pair of fluid course ducts extending through said body to communicate with the interior of the drill stem, said ducts terminating in downwardly directed discharge ends spaced outwardly from the center line of the bit and positioned forwardly of said cutting elements and rearwardly of said outer roller cutters in the direction of rotation of the bit, said discharge ends being positioned and directed to discharge streams of high pressure fluid directly against the well bottom adjacent to the trailing sides of said outer roller cutters, said lower portion of said bit being reduced providing open spaces between said cutting elements and said outer roller cutters below said discharge ends whereby unimpeded streams of high pressure fluid from said discharge ends of said ducts may directly blast the bottom of the well hole adjacent to the bottom sides of said outer roller cutters during the drilling operation.

14. A rotary drill bit adapted to be attached to a drill stem comprising a body having an upper portion and a lower portion, said lower portion having a plurality of outer roller cutters mounted for rotation thereon in circularly spaced relation with respect to one another and to cut in substantially the same circular path defining the

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outer bottom part of a well hole, said lower portion having cutting elements thereon within the path of travel of said outer roller cutters and circularly spaced in trailing relationship thereto to cut the inner bottom part of the well hole at substantially the same level as the cut taken by said outer roller cutters, a pair of fluid course ducts extending through said body to communicate with the interior of the drill stem, said ducts terminating in downwardly directed discharge ends located in the lower portion of said body between said cutting elements and said outer roller cutters and below the upper ends of the latter, said discharge ends being positioned and directed outwardly from the center line of the bit to discharge streams of high pressure fluid directly against the bottom of the well adjacent to the bottom sides of said outer roller cutters, said lower portion being reduced providing open spaces between said cutting elements and said outer roller cutters below said discharge ends whereby unimpeded streams of high pressure fluid from said discharge ends of said ducts may directly blast the bottom of the well hole adjacent to the bottom sides of said outer roller cutters during the drilling operation.

15. A rotary drill bit adapted to be attached to a drill stem comprising a body having an upper portion and a lower portion, said lower portion having a plurality of outer roller cutters mounted for rotation thereon in circularly spaced relation with respect to one another and to cut in substantially the same circular path defining the outer bottom part of a well hole, said lower portion having cutting elements thereon within the path of travel of said outer roller cutters and circularly spaced in trailing relationship thereto to cut the inner bottom part of the well hole at substantially the same level as the cut taken by said outer roller cutters, a pair of fluid course ducts extending through said body to communicate with the interior of the drill stem, said ducts terminating in downwardly directed discharge ends located between said cutting elements and said outer roller cutters below the upper ends of the latter and adjacent to the center of rotation of said outer roller cutters, said lower portion being reduced providing open spaces between said cutting elements and said outer roller cutters below said discharge ends whereby unimpeded streams of high pressure fluid from said discharge ends of said ducts may directly blast the bottom of the well hole adjacent to the bottom sides of said outer roller cutters during the drilling operation.

16. A rotary drill bit adapted to be attached to a drill stem comprising a body having an upper portion and a lower portion, said lower portion having a plurality of outwardly and upwardly directed spindles thereon and outer roller cutters on said spindles in circularly spaced relation with respect to one another to cut in substantially the same circular path defining the outer bottom part of a well hole, said lower portion having cutting elements thereon within the path of travel of said outer roller cutters to cut the inner bottom part of the well hole at substantially the same level as the cut taken by said outer roller cutters, a pair of fluid course ducts extending through said body to communicate with the interior of the drill stem, said ducts terminating in downwardly directed discharge ends in the lower portion of said body at substantially the level of said spindles and between said cutting elements and said outer roller cutters, said discharge ends being positioned and directed outwardly from the center line of the bit to discharge streams of high pressure fluid directly against the bottom of the well adjacent to the bottom sides of said outer roller cutters, said lower portion being reduced providing open spaces between said cutting elements and said outer roller cutters below said discharge ends whereby unimpeded streams of high pressure fluid from said discharge ends of said ducts may directly blast the bottom of the well hole adjacent to the bottom sides of said outer roller cutters during the drilling operation.

17. A rotary drilling tool comprising a body having means at its upper end for connecting a drill stem thereto and whose lower portion is reduced in thickness, forming opposite side faces and terminating in oppositely arranged cutting blades, a spindle on each side face, a rolling cutter on each spindle adjacent the corresponding side face, said body having channels leading therethrough terminating in discharge ends located between said blades and the adjacent sides of the respective rolling cutters, said discharge ends being positioned to discharge the flushing fluid outwardly ~~and~~ blast directly against the bottom of the well adjacent to the cutting portions of said rolling cutters.

Patent Off.c
misprint [illegible]
See Certificate
of Correction
at end of
Patent.

18. A hydraulic rotary deep well drill for attachment to a drill stem including a body having a downwardly extending reduced shank with opposite broad faces terminating in oppositely arranged cutting blades, a spindle on each broad face, a roller cutter on each spindle, a pair of fluid courses extending through said body which communicate with the interior of the drill stem and terminate in downwardly directed discharge ends offset from the central axis of the drill, the discharge ends of said fluid courses being positioned between respective blades and roller cutters in the direction of rotation of the drill and in sufficient proximity to the bottom end of the drill to direct a concentrated blast of flushing fluid under high pressure between said blades and roller cutters to blast substantially on the outer bottom portion of the well hole.

19. A rotary drilling tool comprising a bit body having means at its upper end for the connection of a drill stem thereto and whose lower portion is reduced in thickness, forming opposite side faces, and terminating in oppositely arranged cutting blades, a spindle on each side face, a rolling cutter on each spindle adjacent the corresponding side face, said rolling cutter comprising a cutter body, cutting teeth on the periphery of the cutter body and spaced apart therearound so as to form notches between the teeth, cutting edges on the cutter body within said notches, the cutting teeth projecting out farther than the cutting edges, the cutting teeth having cutting edges which form substantially continuations of the cutting edges in the notches, thus providing a rolling cutter having a sharpened periphery throughout the circumference thereof, said bit body having channels leading therethrough and positioned to deliver streams of flushing fluid between the forward faces of the blades and the adjacent sides of the respective rolling cutters and directly against the bottom of the well bore.

20. A rotary drill bit adapted to be attached to a drill stem including a body portion with a cutting portion thereon, said cutting portion consisting of a plurality of outer roller cutters for cutting the outer bottom part of a well hole and

a drag type blade having roller cutters thereon for cutting the inner bottom part of the well hole, said drag type blade having slots therein, axle pins positioned across said slots and mounted on said drag type blade, said last named roller cutters adapted to rotate about said axle pins and through said slots, fluid course ducts extending through said drill bit and communicating with the interior of said drill stem whereby flushing fluid forced through said drill stem is adapted to wash debris and cuttings from said cutting portion of the drill bit during drilling operation

CLARENCE WELLINGTON KINNEAR

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Certificate of Correction

Reissue No 23,416 October 16, 1951

CLARENCE WELLINGTON KINNEAR

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows:

Column 5, line [illegible], for "rear" read near; column 10, line [illegible], for "*anaid*" read *and*;

and that the said Letters Patent should be read as corrected above, so that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 1st day of April, A. D. 1952.

[SEAL]

THOMAS F. MURPHY,
Assistant Commissioner of Patents.

July 10, 1945. C. W. KINNEAR **2,380,112**

DRILL

Filed Jan. 2, 1942 3 Sheets-Sheet 1

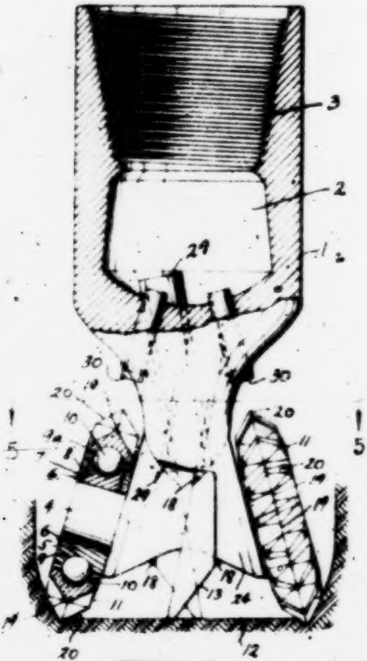

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Fig. 1

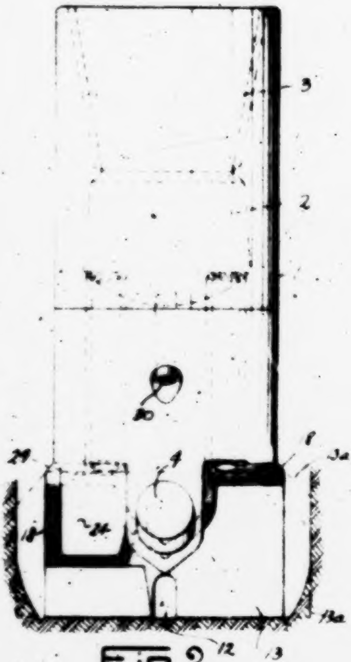

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Fig. 2

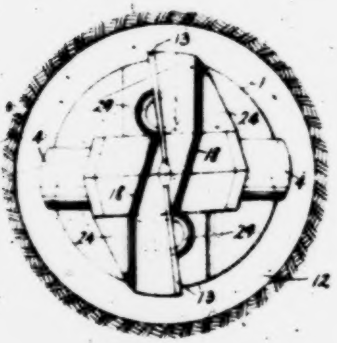

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Fig. 3

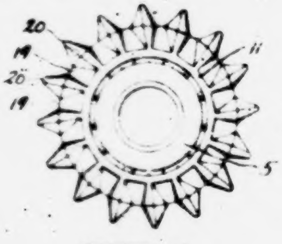

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Fig. 4

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July 10, 1945. C. W. KINNEAR 2,380,112

DRILL

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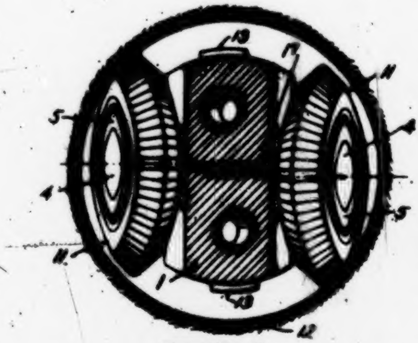
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Fig.5.

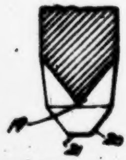

Fig.7.

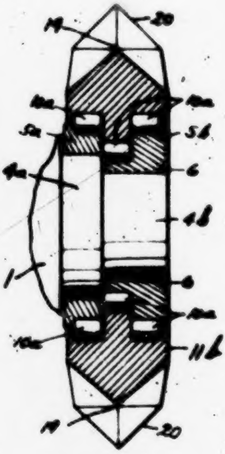
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Fig.6.

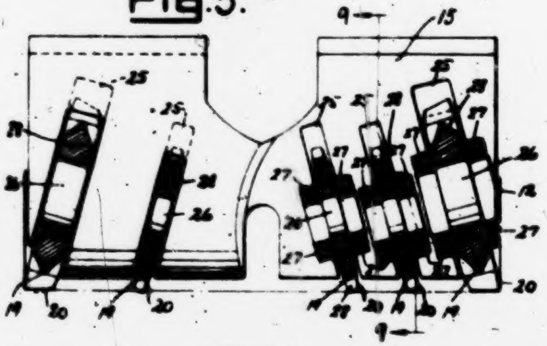
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Fig.8.

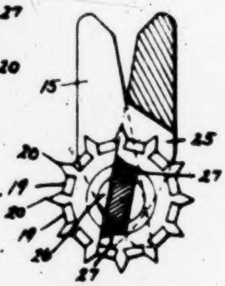
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Fig.9.

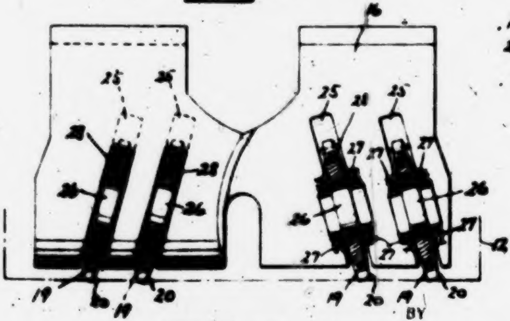
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Fig.10.

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DRILL

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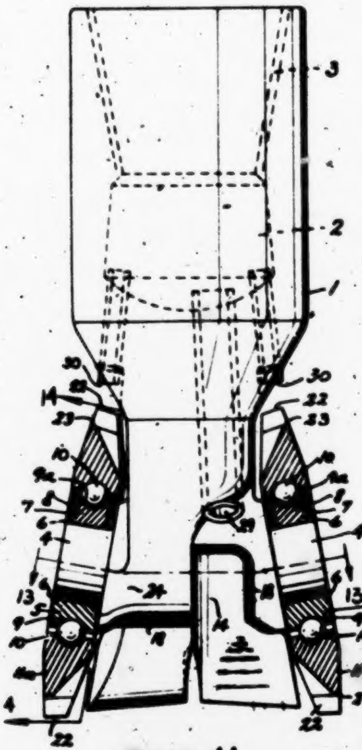
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Fig. 11.

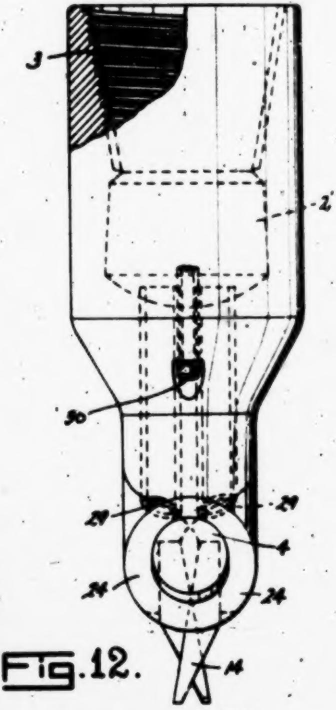
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Fig. 12.

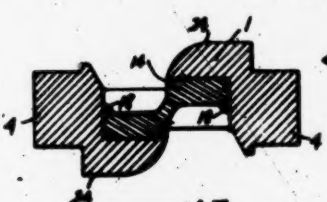
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Fig. 13.

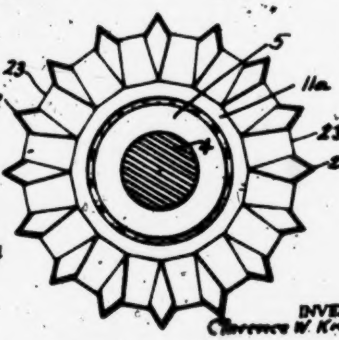
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Fig. 14.

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Patented July 10, 1945 **2,380,112**

REISSUED

OCT 16 1951

RE 23416

UNITED STATES PATENT OFFICE

2,380,112

DRILL

Clarence Wellington Kinnear, Houston, Tex.

Application January 2, 1942, Serial No. 425,408

2 Claims. (Cl. 255—71)

This invention relates to new and useful improvements in a rotary drill bit.

An object of the invention is to provide a drill bit to be used in rotary drilling of oil wells, or deep water wells or the like, said drill bit having cutting elements thereon for the penetration of the earth and suitable for either hard rock, shale, or tough sticky earth formation drilling.

Another object of the invention is to provide a rotary drill bit of the type above referred to, with outer roller cutting elements being so constructed and arranged to cut a furrow or groove in the earth formation around the outer bottom periphery of the well hole to weaken the remaining portion of the earth formation on the inner bottom part of the hole to be easily cut or torn up by other cutting elements arranged and provided for that purpose during initial hole drilling operations.

A further object of the invention is to provide a rotary drill bit of the character described having outer lower roller cutting elements extending outwardly and downwardly from the vertical central axis of the bit frame or body, and positioned on the outside of the frame or body of the bit, and having other cutting elements underneath the frame or body of the bit.

A further object of the invention is to provide a rotary drill bit of the character described having a frame or body larger on the upper portion with a suitable connecting means for a drill stem, and a centralized thinner or lesser dimension on the lower portion for the attachment of the cutting elements.

A further object of the invention is to provide a rotary drill bit of the character described having roller cutting elements thereon and being so designed that the weight of the drill stem will shear the earth formation from the cutting teeth and from between the cutting teeth on the roller cutting elements as the drill bit is rotated and forced through the earth.

A further object of the invention is to provide a rotary drill bit of the character described having flushing fluid courses so positioned and directed as to permit the flushing fluid to flush across the forward faces of the cutting elements cutting the inner bottom portion of the well hole and at the same time blast the earth formation at the bottom of the hole near the bottom side of the roller cutting elements cutting the outer bottom portion of the well hole.

A further object of the invention is to provide a rotary drill bit of the character described having roller cutting elements with a series of serrations or cutting teeth and a series of crotches spaced between the cutting teeth, and another series of cutting edges within the crotches between the teeth.

A further object of the invention is to provide a rotary drill bit of the character described having a thin scrape or fish tail like blade with longitudinal slots, and having bearing pins or axles spanning the slots and welded to the thin blade on each side of the slots, and with roller cutting elements adapted to rotate about the pins.

A further object of the invention is to provide a rotary drill bit of the character described having roller cutting elements mounted on antifrictional bearing assemblies.

A further object of the invention is to provide a rotary drill bit of the character described with roller cutting elements having a series of spaced cutting teeth with a series of associated crotches spaced between the cutting teeth, and with the lower part of the crotches sharpened and shaped ridge like for spliting the chip or cuttings so that weight applied from the drill stem will aid in shearing earth cuttings from between the cutting teeth, away from the crotches and force the cuttings up and away from the roller cutters during drilling operation.

These and other objects of the invention will in part be obvious and will in part be more fully disclosed in the accompanying drawings which show by illustration three embodiments of the invention, in which:

Fig. 1 is a vertical side view partly sectional of the drill bit with the cutting elements mounted thereon, and positioned at the bottom of a well hole.

Fig. 2 is a vertical side view of the drill bit body turned at 90 degrees to Fig. 1, showing the drag type bit blade welded to the body, and positioned at the bottom of a well hole;.

Fig. 3 is a bottom plan view of the bit body shown in Fig. 1, with the drag type blade welded thereon, and positioned in a well hole;

Fig. 4 is a side view of one of the outer roller cutters mounted on an antifrictional bearing assembly as shown in Fig. 1;

Fig. 5 is a cross section through section line 5—5 of Fig. 1, showing the lower part of the bit body with cutting elements thereon and positioned in a well hole;

Fig. 6 is a side view partly sectional of a roller cutter assembly mounted on an axle pin showing the application of cylindrical type antifrictional bearings;

Fig. 7 is a sectional side view of a roller cutter cutting teeth with the outer cutting point dubbed and sharpened;

Fig. 8 is a vertical side view partly sectional showing another embodiment of the drag type blade having roller cutter assemblies attached thereon, and adapted to cut the full gauge of the well hole to be drilled;

Fig. 9 is a section taken through section line 9—9 of Fig. 8, showing a roller cutter assembly mounted on the drag type bit blade and being turned at 90 degrees to Fig. 8;

Fig. 10 is a vertical side view of a drag type bit blade showing roller cutter assemblies partly sectional attached thereon, and adapted to cut a lesser gauge than the full gauge of the hole to be drilled;

Fig. 11 is a vertical side view partly sectional of another embodiment of the drill bit;

Fig. 12 is a vertical side view partly sectional of the drill bit body with drag type blade attached thereto and turned at 90 degrees to Fig. 11;

Fig. 13 is a cross section of the drill bit body and drag type blade taken through section line 13—13 of Fig. 11;

Fig. 14 is a vertical side view partly sectional showing a roller cutter mounted on an antifrictional bearing assembly, and attached to an axle pin and being taken through section line 14—14 of Fig. 11.

The invention will be better understood from a detailed description thereof wherein like numerals denote like parts in the accompanying drawings of the present embodiments of the invention.

The numeral 1 designates the frame or body of the bit which has an interior cavity 2 formed in the upper end thereof, said cavity being provided with a threaded portion 3 to receive a drill stem. The middle and lower part of the bit body narrows down to a lesser dimension forming a downwardly extending central shank. This downwardly extending central shank is somewhat enlarged on its lower portion and has outwardly and upwardly extending axle pins 4 thereon. Races 5 are fitted on to axle pins 4 and secured thereto by welding material 6. These races in Fig. 1, and Fig. 11, have antifrictional bearing assembly holes 7 in which is placed bearing retaining plugs 8 with race grooves 9 in the races and race grooves 9a in the retaining plugs for retaining ball bearings 10 which are adapted to rotate about the races; however the races and bearing applications are different as shown in Fig. 6. It being understood that any well known bearing and race application could be used. In Fig. 6, the axle pin is of larger diameter adjacent the bit body 1 at 4a and of smaller diameter on the outer end 4b. A larger diameter race 5a is fitted on axle pin portion 4a and race 5b is fitted on axle pin portion 4b and secured thereto by welding material 6. Cylindrical antifrictional bearings 10a are mounted on the races 5a and 5b and are adapted to rotate about said races. The middle set of cylindrical antifrictional bearings rotate about a race surface of lesser diameter than the two outer sets of cylindrical antifrictional bearings.

Cutting elements forming the cutting portion of the drill bit are of different forms and character and are placed at different positions and angles with respect to each other in different embodiments of the invention to meet the requirements of drilling in different localities of the earth. These cutting elements consist in different embodiments of the invention of outer bottom roller cutters 11, 11a, and 11b to be used for cutting the outer bottom part of well hole 12, and inner bottom cutting elements 13, 13a, 14, 15 and 16 to be used for cutting the inner bottom part of well hole 12, which are attached by welding 18 to either one of the bit bodies. Different inner bottom cutting elements are selected to suit the substance being drilled. The inner bottom cutting elements 13, 14, and 15 are adapted to cut a lesser gauge than the full gauge of well hole 12 while the inner bottom cutting elements 13a, and 16 are adapted to cut the full gauge of hole 12. It being shown in Fig. 2, that drag blade 13 could easily be extended wider at 13a to cut the full gauge of the hole. Hard surface material may be attached to any or all of the cutting elements or bearing surfaces in the well known manner. The outer bottom roller cutters are mounted on antifrictional bearings as shown and situated to lean inwardly at the top and outwardly at the bottom, and to rotate about said bearings and exteriorly of the frame or body of the bit which will help prevent debris or cuttings from clogging or stopping the rotation of said roller cutters. The axis of the axle pins 4 about which the outer bottom roller cutters are adapted to rotate are each oppositely set forward of the diametrical center line 17 of the drill bit as shown in Fig. 5, thus allowing the outer bottom roller cutters to cut the gauge of the hole on the forward outer side bottom portion of said roller cutters during rotating operation and also allowing clearance between the well hole gauge and the back and lower portion of the outer bottom roller cutters during rotation; however, the axis of the axle pins could be placed on the diametrical center line of the bit if desired. Cutting teeth and crotches between said cutting teeth on the roller cutters shown are of unique design and are very important as the weight of the drill pipe will aid in shearing the debris or cuttings from the cutting teeth, and from the crotches between the cutting teeth during drilling operation. In Figs. 1, 4, 6, 7, 8, 9, and 10 the roller cutters all have spaced sharpened ridge like cutting edges 19 centrally located within the crotches between the spaced cutting teeth 20 for splitting the chip or cuttings. In Fig. 7, the cutting tooth is somewhat dubbed off and sharpened on the outer cutting point 21. In Figs. 11 and 14, the roller cutters 11a have spaced cutting teeth 22 with spaced sharpened ridge like cutting edges 23 within the crotches between said cutting teeth. The spaced sharpened cutting edges 23 are situated to one side of the center of the spaced cutting teeth 22 for forcing the main portion of the chips or cuttings toward the inner part of the well hole during drilling operation.

The construction of the inner bottom cutting elements are of different design as aforestated and are placed adjacent to blade supports 24 of the bit body and firmly welded thereto as shown, thereby taking a great part of the downward thrust off of the outer roller cutting elements when drilling. Inner bottom cutting elements 13, 13a, and 14 are of the fish tail drag type blade, and inner bottom cutting elements 15, and 16 are drag type blades having slots 25 therein with axle pins 26 positioned across said slots and embedded in and secured to said blades 15, and 16, by welding material 27. Roller cutters 28 are mounted on axle pins 26 and adapted to rotate about said axle pins, and through said slots 28.

Large fluid course ducts 29 and smaller fluid course ducts 30 extend through the drill bit body and communicate with the interior of a drill stem (not shown) whereby flushing fluid forced through said drill stem is adapted to wash debris and cuttings from the cutting elements of the drill bit during drilling operation.

In the operation of the drill bit a suitable drill stem is attached to the threaded portion thereof and the device is rotated and fed forward into the earth. As the drill rotates the roller cutting elements rotate about their respective axle pins and cut deepened grooves in the earth formation within their path of rotation and the drag type cutting elements cut or tear the remaining portion of the earth formation within their path of movement. The roller cutters being of extraordinary design cut chips or cuttings from the bottom of the well hole and the chips or cuttings caught in the crotches between the cutting teeth of the roller cutters are forced from the crotches and out into the open hole by the aid of the weight of the drill stem urging the cutting teeth to slice through the earth and to take hold of other chips or cuttings. Flushing fluid is forced through the drill stem into the bit body, and emerges through the fluid course ducts for washing debris and cuttings from the drill bit. The large fluid course ducts are so positioned on the bit body with respect to the cutting elements that they are adapted to wash down the front cutting faces of the inner cutting elements and blast the bottom of the well hole near where the outer roller cutters are taking their portion of the cut with the same direct blast. It being remembered that flushing fluid under high pressure will dislodge and cut a great amount of the cuttings from the bottom of the well hole. This position of these fluid course ducts with respect to the cutting elements, and with respect to their emerging on the exterior surface and well upon the outside surface of the bit body are of extreme importance as this allows the flushing fluid to directly blast cuttings away from the outer side periphery of the bit body, directly blast down the front faces of the inner cutting elements, directly blast along the side of the outer bottom roller cutters, and directly blast the bottom of the well hole in the near proximity of where the inner bottom cutting elements and the outer bottom roller cutters take their respective cuts in the substance being drilled. The smaller fluid course ducts directly blast the cutting teeth on the outer bottom roller cutters as the said teeth on the cutters rotate past the port holes of said smaller fluid course ducts during drilling operation.

It is obvious that many changes may be made in the details of construction and arrangement of parts by one skilled in the art without departing from the scope of the invention.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:

1. A rolling cutter for use in well drills comprising, a disc-like body having on its periphery cutting teeth terminating in outwardly directed cutting edges and spaced apart so as to leave notches, or depressions, between the cutting teeth, that portion of the notches, or depressions, forming the body of the rolling cutters, being beveled so as to form sharp cutting edges extending circumferentially of the disc-like body, the cutting edges of the teeth extending radially further than the circumferential cutting edges of the notches.

2. A rolling cutter for use in well drills comprising, a disc-like body having on its periphery cutting teeth spaced apart so as to leave notches between the cutting teeth, that portion of the notches, forming the body of the rolling cutter, being beveled so as to form cutting edges extending, approximately, circumferentially of the disc-like body, the cutting edges of the teeth extending radially further than the circumferential cutting edges of the notches.

CLARENCE WELLINGTON KINNEAR.

MOTION FOR LEAVE TO
FILE PETITION FOR RE-
HEARING OF ORDER DENY-
ING PETITION FOR WRIT OF
CERTIORARI AND MOTION TO
FULL JUDGEMENT

FILE COPY

MOTION FILED JUN 1 1960

NO. 435

IN THE

Supreme Court of the United States

October Term, 1959

KINNEAR-WEED CORPORATION, *Petitioner*,
v.
HUMBLE OIL AND REFINING COMPANY,
Respondent

MOTION FOR LEAVE TO FILE PETITION FOR REHEARING OF ORDER DENYING PETITION FOR WRIT OF CERTIORARI AND MOTION TO RECALL JUDGMENTS

WILLIAM E. KINNEAR
Suite 201-B Gilbert Building
Beaumont, Texas
Counsel for Petitioner

Alpha Law Brief Co., 402 M & M Bldg., Houston 2

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NO. 435

IN THE
Supreme Court of the United States

OCTOBER TERM, 1959

KINNEAR-WEED CORPORATION, *Petitioner*,
v.
HUMBLE OIL AND REFINING COMPANY,
Respondent

MOTION FOR LEAVE TO FILE PETITION FOR REHEARING OF ORDER DENYING PETITION FOR WRIT OF CERTIORARI AND MOTION TO RECALL JUDGMENTS

Petitioner, Kinnear-Weed Corporation, respectfully moves for leave to file the annexed petition, motion and appendix for rehearing of the order of this court denying Writ of Certiorari in this case, entered on Nov. 23, 1959, Order to issue mandate on Dec. 18, 1959, and, Motion for Recall of Judgment in all respects of the United States Court of Appeals for the Fifth Circuit in this case, entered on Sept. 22, 1958, and, Motion for Recall of Judgment in all respects of the United States District Court for The Eastern District of Texas in this case, entered Oct. 10, 1956. Rehearing, Motion to Recall Judgments and order for new trial is sought at this time because, of newly discovered evidence as is pointed out more fully in the annexed petition, motion and appendix that the said judgments are void and should be so declared void by order of this court and the case remanded for new trial because petitioner was denied due process of law, being denied a fair trial in a fair tribunal for the reasons that the Judge of said United States District Court was disqualified to hear, try, determine and render judgment in this case. Petitioner had no knowledge of ~~some~~ "any" of the facts of the disqualifications of said Judge until after Petition for Writ of Certiorari had been filed in the Supreme Court of the United States in this case. Full knowledge of the disqualifying facts of said Judge as set out in the annexed petition, motion and appendix, most of which was not actually discovered and known to petitioner of its own knowledge until after order denying petition for Writ of Certiorari in this case and the full evidentiary facts were not accumulated by Petitioner until on or about May 15, 1960. Petitioner sold all of its rights, title and interests in and to this suit on Dec. 9, 1959 to C. W. Kinnear by written assignment to prosecute this case in his and/or petitioner's name and who timely presented for filing a proper proposed Petition for Rehearing of Order denying Writ of Certiorari on Dec. 18, 1959 in his and/or petitioner's name which the Clerk of the Supreme Court refused to file, and, C. W. Kinnear in like manner and with like authority presented another proper proposed petition for rehearing of said order denying Writ of Certiorari in this case on Jan. 7, 1960, which the Clerk of the Supreme Court refused to file, and, your present petitioner Kinnear-Weed Corporation has again acquired all right, title and interest in and to said suit on May 24, 1960, as per written assignment in the appendix to the annexed petition assigning Petitioner all proprietary interest in said suit enabling petitioner in its name and by its own authority to file annexed Petition, Motion and Appendix at this time in this case.

Although the annexed petition for rehearing is filed after the expiration of the time prescribed in Rule 58, under the provisions of the statute 28 U.S.C. Sec. 452 the Court clearly has the power in its discretion, to entertain the annexed petition, motion and appendix. The said unfair trial in said District Court was due to the disqualifications of said judge in this case which has caused your petitioner manifest injustice and therefore petitioner respectfully urges the annexed petition and motion be granted by order of the Supreme Court on the ground that interest in finality must yield where the interest of justice requires it as clearly established in this case by the annexed petition, motion and appendix. *Raymond G. Cahill v. New York, New Haven & Hartford R. R. Co.*, 351 U.S. 183, 100 L.Ed. 1075, 76 S. Ct. 758; *United States v. Ohio Power Co.* 353 U.S. 98, 1 L.Ed. 2d 683, 77 S. Ct. 652, rehearing denied 353 U.S. 977, 1 L.Ed. 2d 1139, 77 S. Ct. 1053. And further, petitioner respectfully urges the annexed petition and motion be granted by order of the Supreme Court on the ground that petitioner was denied due process of law under ~~Sec. 1 of~~ the V. ~~XIVth~~ Amendment to the Constitution of the United States due to the disqualifications of the said judge in said District Court, and, said judge was further disqualified in this case under the provisions of Title 28 U.S.C. Section 455, all as clearly established in this case by the annexed petition, motion and appendix due to the fact petitioner was denied a fair trial, in a fair tribunal.

In Re Murchison, et al., 349 U.S. 133, 99 L. Ed. 942, 75 S. Ct. 623.

Respectfully submitted,

Dated: May 30, 1960.

WILLIAM E. KINNEAR
Suite 201-B Gilbert Building
Beaumont, Texas
Counsel for Petitioner

Certificate of Counsel

I, William E. Kinnear, attorney for KINNEAR-WEED CORPORATION in the above entitled case, hereby certifies that the above and foregoing MOTION is presented in good faith, and, not for the purpose of delay, but is in the opinion of counsel, well founded in law and proper to be filed herein.

(William E. Kinnear)

Proof of Service

I, WILLIAM E. KINNEAR, Counsel for Kinnear-Weed Corporation, Petitioner herein, and a member of the Bar of the Supreme Court of the United States, hereby certify that, on the 30th day of May, 1960, I served copies of the foregoing Motion on Humble Oil and Refining Company, Respondent by duly mailing the required copies in a duly addressed envelope by registered air mail return receipt requested, postage prepaid to Mr. Walter B. Morgan, Esq., Counsel for Respondent, Post Office Box 2180, Houston, Texas.

Dated: May 30, 1960.

WILLIAM E. KINNEAR
Suite 201-B Gilbert Building
Beaumont, Texas
Counsel for Petitioner

NO. 435

IN THE

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1959

KINNEAR-WEED CORPORATION, *Petitioner*,
v.
HUMBLE OIL AND REFINING COMPANY,
Respondent

PETITION FOR REHEARING OF ORDER DENYING PETITION FOR WRIT OF CERTIORARI AND MOTION TO RECALL JUDGMENTS

Petitioner, Kinnear-Weed Corporation prays that this Court grant Rehearing of its order of Nov. 23, 1959, denying the petition for writ of Certiorari, 4 L.ed. 2d 158, and that a writ of certiorari issue to review the judgment of the Court of Appeals for the Fifth Circuit in the above-entitled case as prayed for in the petition filed Sept. 28, 1959, herein, and, prays the Court for order to recall of all judgments in this case and order all said judgments vacated, set aside and declared void and reinstate petitioner's claims in this case and reverse and render judgment for petitioner against respondent as prayed for in the complaint, or, remand said case to the District Court for new trial for the following good and sufficient reasons, to wit:

I.

Petitioner avers upon information and belief that Judge Lamar Cecil, Deceased, a former District Judge of the United States District Court for the Eastern District of Texas, did illegally hear, try, determine and render judgment against petitioner and for respondent in this case as Judge of said Court due to the fact that said Judge was disqualified according to the provisions of Title 28 U.S.C., Section 455 (June 25, 1948, c. 646, 62 Stat. 908) and ~~Sec. 1 of~~ the V ~~XIVth~~ Amendment to the Consitution of The United States and its provisions guaranteeing Due Process of Law to hear, try, determine and render judgment in this case because of Judge Lamar Cecil's substantial interest in this case and his relationship and connection with respondent and with others related to or connected with Judge Lamar Cecil and respondent in this case prior to and during the time of the trial and proceedings in this case, all without knowledge of petitioner during such time or times, in which case petitioner was denied a fair trial in a fair tribunal because of the disqualification of said Judge Lamar Cecil as judge of said Court in this case as hereinafter alleged, to-wit:

1. Judge Lamar Cecil and/or his wife, Mary (Reed) Cecil owned substantial interests in shares of the capital stock of respondent (Exhibits Nos. 6 and 9 in the appendix attached hereto and made a part hereof);

2. Judge Lamar Cecil and/or his wife, Mary (Reed) Cecil owned substantial interests in shares of the capital stock of respondent (Exhibits Nos. 6 and 9 in the appendix attached hereto and made a part hereof) and, received dividends on said shares of said capital stock;

3. Judge Lamar Cecil and/or his wife, Mary (Reed) Cecil owned substantial interests in shares of the capital stock of Standard Oil Company (New Jersey) and its subsidiary, associated or affiliated company Standard Oil Company of Indiana (Exhibits Nos. 1 and 9 in the appendix attached hereto and made a part hereof) which said Standard Oil Company (New Jersey) owned over 50% (Stipulation of Record, R. VII, 1852) of the shares of the capital stock of respondent.

4. Judge Lamar Cecil and/or his wife, Mary (Reed) Cecil were benefited by, connected with, and/or doing business with respondent and owned substantial oil, gas and mineral interests and/or royalty interests in minerals in lands with respondent and upon which respondent operated wells and produced oil and/or gas therefrom (Exhibits 1, 2, 4, 5 and 9 in the appendix attached hereto and made a part hereof);

5. Judge Lamar Cecil and/or wife, Mary (Reed) Cecil were benefited by, connected with, and/or doing business with respondent and owned substantial oil, gas and mineral interest and/or royalty interest in minerals in lands with respondent and upon which respondent operated wells and produced oil and/or gas therefrom (Exhibits Nos. 1, 2, 4, 5 and 9 attached hereto and made a part hereof), some of which wells were drilled with the *alleged accused infringing drill bits* that unjustly enriched respondent, Judge Lamar Cecil and/or his wife Mary (Reed) Cecil at petitioner's expense;

6. Judge Lamar Cecil and/or his wife, Mary (Reed) Cecil owned substantial undivided interest in real estate with respondent, and, undivided oil, gas and mineral interest and/or royalty interests in minerals in real estate with respondent (Exhibits Nos. 1, 2, 4, 5 and 9 in the appendix attached hereto and made a part hereof);

7. Judge Lamar Cecil and/or his wife, Mary (Reed) Cecil owned 15 shares of the capital stock in the Coastal Tool Company and/or Coastal Tool Company, Inc., and said Judge was on the Board of Directors thereof, and, said stock was appraised in the Inventory of his estate and valued at $14,000.00 and which is alleged to be a substantial interest, (Exhibits in the appendix Nos. 7, 8 and Exhibit No. 1 on page 5 thereof attached hereto and made a part hereof) which said tool company or companies *relied greatly upon the patronage of Respondent* and with whom Respondent did much business profitable to said tool company or companies and profitable to said Judge Lamar Cecil and/or his wife, Mary (Reed) Cecil as owner of said stock of said tool company or companies.

8. Judge Lamar Cecil made Finding of Fact 86 and Conclusion of Law 7 in this case (150 F. Supp. 143-63) holding and deciding that because of petitioner's contentions for the scope of petitioner's patents in suit the entire bit manufacturing industry and the entire oil industry are affected by and concerned with the validity of the claims of said patents. Judge Lamar Cecil and/or his wife, Mary (Reed) Cecil owned substantial interests in the shares of capital stock of respondent and received dividends thereon from Respondent (Exhibits Nos. 6 and 9 in the appendix attached and made a part hereof), and, in the capital stock of other major oil and gas companies in the oil and gas industry and received dividends thereon (Exhibit No. 1

on pages 4 and 5 attached hereto and made a part hereof), which Exhibit No. 1 shows as follows:

Standard Oil Company (New Jersey)	$ 399.00
Standard Oil Company of Indiana	3625.00
El Paso Natural Gas Company	11252.00
Tennessee Gas & Transmission Company	3325.00
Middle States Petroleum Company	925.00
Equitable Gas Company	2963.00
United Carbon Company	3750.00
	$26219.00

all of which *would have been concerned with and affected by* the claims of petitioner's patents in suit had Judge Lamar Cecil held in favor of petitioner against Respondent in this case, and, the value of said shares of capital stock and the dividends paid thereon and other oil and gas company stocks owned by Judge Lamar Cecil and/or his wife, Mary (Reed) Cecil *would have been greatly affected and reduced*, and, therefore Judge Lamar Cecil was very much interested in the outcome of this case against *petitioner* and for *respondent* in his own interested behalf as owners of said shares of capital stock, which is a clear case of disqualification of Judge Lamar Cecil in this case because *he knew he was ruling for his own interests against respondent.*

9. T. S. Reed, Father-in-law of Judge Lamar Cecil owned substantial interests in shares of the capital stock of respondent and capital stocks of other oil and gas companies and received dividends thereon, which interests in said stock and said dividends were *illegally protected* by judgment against petitioner and for respondent; as per Exhibit No. 9 in the appendix attached hereto and made a part hereof.

10. Randolph C. Reed, brother-in-law of the Judge Lamar Cecil owned substantial interests in shares of the capital stock of respondent and capital stocks of other oil and gas companies and received dividends thereon, which interests in said stocks and dividends were *illegally protected* by judgment against petitioner and for respondent, as per Exhibit No. 9 in the appendix attached hereto and made a part hereof.

11. Judge Lamar Cecil and/or his wife, Mary Reed Cecil owned substantial interest in shares of the capital stock of respondent and received cash and stock dividends thereon as gains prior to or during the trial and proceedings in this case and during the times or time respondent committed the wrongful acts of infringement of the patents, violation of confidential relationship, unjust enrichment, unfair competition and unfair trade practices, and violation of the anti-trust laws all as set forth in the claims and causes of action alleged and charged against respondent by petitioner in petitioner's complaint and all amendments thereto on file in this case, and, a later sale of said shares of the capital stock of respondent by Judge Lamar Cecil and/or his wife, Mary Reed Cecil did not absolve the above alleged disqualification of Judge Lamar Cecil as Judge of the United States District Court for the Eastern District of Texas to hear, try, determine and render judgment in this case, because of his substantial interest in shares of the capital stock of respondent and cash and stock dividends received thereon as gains during said time or times of said wrongful acts of respondent (Exhibits No. 6 and 9 in the Appendix attached hereto and made a part hereof.)

Conclusion

For the reasons set forth above and in the petition for writ of certiorari, it is respectfully urged that rehearing be granted and that, upon such rehearing, a writ of certiorari issue to the Court of Appeals for the Fifth Circuit; that the Supreme Court order recall of all judgments in this case and order all said judgments vacated, set-aside and declared void, and, reinstate petitioner's claims in this case and reverse and render judgment for petitioner against respondent as prayed for in the complaint, or, remand said case to the District Court for new trial, and for such other and further relief as the Court deems meet and just.

Respectfully submitted,

Dated: May 30, 1960

WILLIAM E. KINNEAR
Suite 201-B Gilbert Building
Beaumont, Texas
Counsel for Petitioner

Certificate of Counsel

I, William E. Kinnear, attorney for KINNEAR-WEED CORPORATION in the above-entitled case, hereby certifies that the above and foregoing PETITION, MOTION AND APPENDIX are presented in good faith, and, not for the purpose of delay, restricted to the grounds therein specified but in the opinion of counsel, well founded in law and proper to be filed herein.

(William E. Kinnear)

Proof of Service

I, WILLIAM E. KINNEAR, Counsel for Kinnear-Weed Corporation, Petitioner herein, and a member of the Bar of the Supreme Court of the United States, hereby Certify that, on the 30th day of May, 1960, I served copies of the foregoing PETITION, MOTION AND APPENDIX on Humble Oil and Refining Company, Respondent, by mailing the required copies in a duly addressed envelope by U. S. mail, return receipt requested, postage prepaid, to Mr. Walter B. Morgan, Esq., Counsel for Respondent, Post Office Box 2180, Houston, Texas.
Dated: May 30, 1960

WILLIAM E. KINNEAR
Suite 201-B Gilbert Building
Beaumont, Texas
Counsel for Petitioner

AFFIDAVIT

THE STATE OF TEXAS §

COUNTY OF JEFFERSON §

C. W. Kinnear, being duly sworn upon oath deposes and says that he is President of KINNEAR-WEED CORPORATION, Petitioner named in the foregoing Petition, Motion and Appendix, that he has read said PETITION Motion and APPENDIX Exhibits Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 attached thereto and that the facts therein stated are true except as to such facts as may be stated upon information and belief which he believes to be true; and, the reason why this verification is not made by Petitioner personally is that the said Petitioner is a corporation of which affiant is an officer. Affiant further says, that plaintiff had no knowledge of any of the facts or matters set forth in the foregoing PETITION MOTION APPENDIX relating to the disqualification of said Judge Lamar Cecil to hear and determine said case prior to and during the time of the trial and proceedings in this case before the District Court and not until after Petition for Writ of Certiorari had been filed in the Supreme Court of the United States.

C. W. Kinnear

(C. W. Kinnear)

Subscribed and sworn to before me by the said C. W. Kinnear this 30th day of May, 1960; to certify which witness my hand and seal of office on said date.

Charlotte Houston

(Charlotte Houston)
Notary Public in and for
Jefferson County, Texas

(Seal)

INDEX TO EXHIBITS IN APPENDIX

EXHIBIT NO. 1: Inventory & Appraisement of the Estate of Judge Lamar Cecil, Deceased;

EXHIBIT NO. 2: Producing oil, gas and minerals interests Pooling Agreement between Judge Lamar Cecil, et al and respondent Humble Oil and Refining Company covering lands in the Amelia Oil and Gas Field, Charles Williams Survey, near Beaumont, Jefferson County, Texas, identified as items (1), (2), (3), (4) and (7) under (b) of (2) on page 1 and 2 of said inventory and appraisement in EXHIBIT NO. 1; and

EXHIBIT NO. 3: Producing oil, gas and mineral lease assigned by Randolph C. Reed and owned and operated by respondent Humble Oil & Refining Company, being the original oil, gas and mineral lease from C. C. Pyle et al, to Randolph C. Reed and covering 149½ acres of land and being all of the E. H. R. Wallis Survey in Chambers County, Texas; and,

EXHIBIT NO. 4: Assignment of producing oil, gas and mineral lease from Randolph C. Reed to respondent Humble Oil & Refining Company, reserving unto said Randolph C. Reed 1/24 overriding royalty interest in the minerals covering 149½ acres of land and being all of the E. H. R. Wallis Survey in Chambers County, Texas, from which overriding royalty interest Judge Lamar Cecil derived his overriding royalty interest as set out in items (5) and (6) under (b) of (2) on page 2 of the Inventory & Appraisement of the Estate of Judge Lamar Cecil in Exhibit No. 1; and, EXHIBIT NO. 5: Assignment of producing oil, gas and mineral overriding royalty interest from Randolph C. Reed to Judge Lamar Cecil covering 149½ acres of land and being all of the E. H. R. Wallis Survey in Chambers County, Texas, and listed as items (5) and (6) under (b) of (2) on page 2 of said Inventory & Appraisement of the estate of said Judge Lamar Cecil, Deceased in EXHIBIT NO. 1; and,

EXHIBIT NO. 6: Part of 1955 U. S. Income Tax Return of Judge Lamar Cecil and/or his wife, Mary Reed Cecil being evidence of their ownership of shares of the capital stock of respondent prior to and during the trial and proceedings in this case; and,

EXHIBIT NO. 7: Form 1099, U. S. INFORMATION RETURN FOR CALENDAR YEAR 1955 from Coastal Tool Company to Lamar Cecil; and,

EXHIBIT NO. 8: Form 1099, U. S. INFORMATION RETURN FOR CALENDAR YEAR 1956 from Coastal Tool Company to Lamar Cecil; and,

EXHIBIT NO. 9: Affidavit of C. W. Kinnear.

EXHIBIT NO. 10: Assignment Kinnear patent No. 2380112 and Re. 23,416 together with all suits, claims and causes of action past, present and future.